DAIKIN

technical data

VRV II Systems

RXQ-M9W1B

VRVII Cooling only system

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RXQ5-10M9W1B

1 Specifications

1-1 TECHNICAL SPECIFICATIONS				RXQ5M9W1B	RXQ8M9W1B	RXQ10M9W1B
Capacity	Cooling		kW	14.00	22.40	28.00
Capacity range			HP	5	8	10
Power input (Nominal)	Cooling		kW	4.14	5.92	8.01
Max n° of indoor units to be connected				8	13	16
Tot cap index of indoor units to be connected				162.5	260	325
Casing	Colour			Daikin White		
	Material			Painted galvanised steel		
Dimensions	Packing	Height	mm	1753	1753	1753
		Width	mm	796	1055	1055
		Depth	mm	860	860	860
	Unit	Height	mm	1600	1600	1600
		Width	mm	635	930	930
		Depth	mm	765	765	765
Weight	Machine Weight		kg	141	219	219
	Gross Weight		kg	156	238	238
Heat Exchanger	Dimensions	Length	mm	1345	1640	1640
		Nr of Rows		54	54	54
		Fin Pitch	mm	2.00	2.00	2.00
		Nr of Passes		13	16	16
		Face Area	m²	1.598	1.948	1.948
		Nr of Stages		2	2	2
	Tube type			Hi-XSS (8)		
	Fin	Fin type		Non-symmetric waffle louvre		
		Treatment		Corrosion resistant		
Fan	Type			Propeller		
	Quantity			1	1	1
	Air Flow Rate (nominal)	Cooling	m³/min	75.0	175.0	180.0
	External static pressure		Pa	60 Pa in high static pressure		
	Discharge direction			Vertical		
	Motor	Quantity		1	1	1
		Model		Brushless DC		
		Output motor	W	350	750	750
		Speed	rpm	840	765	785
		Drive		Direct drive		
Compressor	Quantity			1	2	2
	Motor	Quantity		1	1	1
		Model		Inverter		
		Type		Hermetically sealed scroll compressor		
		Speed	rpm	900 ˜6480		
		Motor Output	kW	3.0	0.7	1.6
		Starting Method		Direct on line		
		Crankcase Heater	W	33	33	33
		Quantity		-	1	1
		Model		-	ON - OFF	ON - OFF
		Type		-	Hermetically sealed scroll compressor	Hermetically sealed scroll compressor
		Speed	rpm	-	2900	2900
		Motor Output	kW	-	4.5	4.5
		Starting Method		-	Direct on line	Direct on line
		Crankcase Heater	W	-	33	33

1-1 TECHNICAL SPECIFICATIONS				RXQ5M9W1B	RXQ8M9W1B	RXQ10M9W1B
Operation Range	Cooling	Min	°CDB	-5.0	-5.0	-5.0
		Max	°CDB	43.0	43.0	43.0
Sound Level	Cooling	Sound Power	dBA	72.0	78.0	78.0
		Sound Pressure	dBA	54.0	57.0	58.0
Refrigerant	Name			R-410A		
	Charge		kg	5.6	7.6	8.6
	Control			Expansion valve		
	Nr of Circuits			1	1	1
Refrigerant Oil	Name			Synthetic (ether) oil		
	Charged Volume		l	1.7	1.6 + 1.7 + 2	1.6 + 1.7 + 2
Piping connections	Liquid (OD)	Type		Flare connection		
		Diameter (OD)	mm	9.5	9.5	9.5
	Gas	Type		Flare connection	Braze connection	Braze connection
		Diameter (OD)	mm	15.9	19.1	22.2
	Heat Insulation			Both liquid and gas pipes		
	Max total length		m	300	300	300
Capacity Control Method				Inverter controlled		
Capacity Control				14 to 100		
Safety devices				HPS		
				Fan motor driver overload protector		
				Inverter overload protector		
				PC board fuse	Over current relay	Over current relay
Standard Accessories	Standard Accessories			Installation and operation manual		
	Quantity			1	1	1
	Standard Accessories			-	Connection pipes	Connection pipes
	Quantity			-	3	3
	Standard Accessories			Additional refrigerant label		
	Quantity			1	1	1
Notes				Nominal cooling capacities are based on : indoor temperature : 27°CDB, 19°CWB, outdoor temperature : 35°CDB, equivalent refrigerant piping : 7.5m, level difference : 0m.		
				Sound power level is an absolute value that a sound source generates.		
				Sound pressure level is a relative value, depending on the distance and acoustic environment. For more details, please refer to sound level drawings.		
				Sound values are measured in a semi-anechoic room.		

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1-2 ELECTRICAL SPECIFICATIONS				RXQ5M9W1B	RXQ8M9W1B	RXQ10M9W1B
Power Supply	Name			W1		
	Phase			3N		
	Frequency		Hz	50	50	50
	Voltage		V	400	400	400
Current	Nominal running current (RLA)	Cooling	A	6.50	12.00	12.60
	Starting current (MSC)		A	15.00	71.00	71.00
	Minimum circuit amps (MCA)		A	12.00	19.50	22.40
	Maximum fuse amps (MFA)		A	16.00	32.00	32.00
	Total overcurrent amps (TOCA)		A	14.40	29.80	29.80
	Full load amps (FLA)		A	0.3 (fan motor)	0.7 (fan motor)	0.7 (fan motor)
Voltage range	Minimum		V	360	360	360
	Maximum		V	440	440	440
Wiring connections	For Power Supply	Quantity		5	5	5
		Remark		earth wire include		
	For connection with indoor	Quantity		2	2	2
		Remark		P1 - P2		
Power Supply Intake				Both indoor and outdoor unit		
Notes				MCA/MFA : MCA = 1.25 x maximum RLA + other RLA + EA FLA, MCA<= 2.25 x maximum RLA + other RLA + EA FLA, next lower standard fuse rating minimum 16A		
				MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker)		
				MSC means the maximum current during start up of the compressor		
				Maximum allowable voltage range variation between phases is 2%		
				RLA is based on following conditions : indoor temperature : 270CDB/190CWB , outdoor temperature : 350CDB		
				Select wire size based on the value of MCA or TOCA		
				TOCA means the total value of each OC set		
				Voltage range : units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits		
				For more details concerning conditional connections, see http://www.daikineurope.com/extranet, select "Daikin Documentation" and select "conditional connection", "the requested product type" and "English" from the drop down lists, click the search button. Finally, click on the document title of your choice.		

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2 Options

No	Item	RXQ5M	RXQ8,10M
1	COOL/HEAT SELECTOR	KRC19-26A	
2	FIXING BOX	KJB111A	
3	REFNET HEADER	KHRQ22M29H	KHRQ22M29H
4	REFNET JOINT	KHRQ22M20T	KHRQ22M20T
			KHRQ22M29T
5	CENTRAL DRAIN PAN KIT	KWC26B160	KWC26B280

4TW26671-1

NOTES

All options are kits

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3 Capacity tables

3 - 1 Cooling capacity tables

5HP

TC: Total capacity: kW ; PI: Power input: kW (Comp. + Outdoor fan motor)

Combination (%)	Capacity index	Outdoor air temp. °CDB	Indoor air temperature: °CWB 14,0 TC kW	14,0 PI kW	16,0 TC kW	16,0 PI kW	18,0 TC kW	18,0 PI kW	19,0 TC kW	19,0 PI kW	20,0 TC kW	20,0 PI kW	22,0 TC kW	22,0 PI kW	24,0 TC kW	24,0 PI kW
130%	162.5	10	12.3	1.91	14.6	2.33	17.0	2.78	17.6	2.83	17.9	2.78	18.3	2.66	18.7	2.54
		12	12.3	1.94	14.6	2.38	17.0	2.83	17.4	2.82	17.6	2.76	18.1	2.64	18.5	2.60
		14	12.3	1.98	14.6	2.42	17.0	2.86	17.2	2.80	17.4	2.74	17.8	2.72	18.3	2.75
		16	12.3	2.02	14.6	2.47	16.7	2.85	16.9	2.83	17.2	2.84	17.6	2.87	18.1	2.90
		18	12.3	2.06	14.6	2.52	16.5	2.96	16.7	2.97	16.9	2.99	17.4	3.02	17.8	3.05
		20	12.3	2.10	14.6	2.68	16.3	3.10	16.5	3.12	16.7	3.13	17.2	3.16	17.6	3.20
		21	12.3	2.16	14.6	2.78	16.2	3.18	16.4	3.19	16.6	3.21	17.0	3.24	17.5	3.27
		23	12.3	2.31	14.6	2.98	15.9	3.32	16.2	3.34	16.4	3.35	16.8	3.39	17.3	3.42
		25	12.3	2.47	14.6	3.19	15.7	3.47	15.9	3.48	16.1	3.50	16.6	3.54	17.0	3.57
		27	12.3	2.64	14.6	3.41	15.5	3.61	15.7	3.63	15.9	3.65	16.4	3.69	16.8	3.73
		29	12.3	2.81	14.6	3.65	15.2	3.76	15.5	3.78	15.7	3.80	16.1	3.84	16.6	3.88
		31	12.3	3.00	14.6	3.86	15.0	3.90	15.2	3.93	15.5	3.95	15.9	3.99	16.3	4.03
		33	12.3	3.20	14.3	4.01	14.8	4.05	15.0	4.07	15.2	4.10	15.7	4.14	16.1	4.19
		35	12.3	3.41	14.1	4.15	14.6	4.20	14.8	4.22	15.0	4.25	15.5	4.30	15.9	4.34
		37	12.3	3.63	13.9	4.30	14.3	4.35	14.6	4.37	14.8	4.40	15.2	4.45	15.7	4.50
		39	12.3	3.86	13.7	4.45	14.1	4.50	14.3	4.53	14.6	4.55	15.0	4.61	15.4	4.66
120%	150	10	11.3	1.74	13.5	2.13	15.7	2.53	16.8	2.73	17.6	2.85	18.0	2.74	18.4	2.63
		12	11.3	1.77	13.5	2.17	15.7	2.58	16.8	2.79	17.3	2.83	17.8	2.73	18.2	2.62
		14	11.3	1.81	13.5	2.21	15.7	2.63	16.8	2.84	17.1	2.82	17.5	2.71	17.9	2.73
		16	11.3	1.84	13.5	2.25	15.7	2.68	16.7	2.86	16.9	2.83	17.3	2.85	17.7	2.88
		18	11.3	1.88	13.5	2.30	15.7	2.77	16.5	2.96	16.7	2.97	17.1	3.00	17.5	3.02
		20	11.3	1.91	13.5	2.39	15.7	2.98	16.2	3.10	16.4	3.11	16.8	3.14	17.3	3.17
		21	11.3	1.93	13.5	2.47	15.7	3.09	16.1	3.17	16.3	3.19	16.7	3.22	17.1	3.25
		23	11.3	2.06	13.5	2.65	15.7	3.30	15.9	3.32	16.1	3.33	16.5	3.36	16.9	3.40
		25	11.3	2.21	13.5	2.83	15.5	3.45	15.7	3.46	15.9	3.48	16.3	3.51	16.7	3.54
		27	11.3	2.35	13.5	3.03	15.2	3.59	15.4	3.61	15.6	3.63	16.0	3.66	16.5	3.70
		29	11.3	2.51	13.5	3.24	15.0	3.74	15.2	3.75	15.4	3.77	15.8	3.81	16.2	3.85
		31	11.3	2.68	13.5	3.45	14.8	3.88	15.0	3.90	15.2	3.92	15.6	3.96	16.0	4.00
		33	11.3	2.85	13.5	3.69	14.5	4.03	14.8	4.05	15.0	4.07	15.4	4.11	15.8	4.15
		35	11.3	3.03	13.5	3.93	14.3	4.17	14.5	4.20	14.7	4.22	15.1	4.26	15.5	4.31
		37	11.3	3.23	13.5	4.19	14.1	4.32	14.3	4.35	14.5	4.37	14.9	4.41	15.3	4.46
		39	11.3	3.44	13.5	4.42	13.9	4.47	14.1	4.49	14.3	4.52	14.7	4.57	15.1	4.62
110%	137.5	10	10.4	1.58	12.4	1.93	14.4	2.29	15.4	2.47	16.4	2.66	17.7	2.82	18.0	2.73
		12	10.4	1.61	12.4	1.96	14.4	2.33	15.4	2.52	16.4	2.71	17.4	2.81	17.8	2.71
		14	10.4	1.64	12.4	2.00	14.4	2.38	15.4	2.57	16.4	2.76	17.2	2.79	17.6	2.71
		16	10.4	1.67	12.4	2.04	14.4	2.42	15.4	2.62	16.4	2.82	17.0	2.83	17.4	2.85
		18	10.4	1.70	12.4	2.08	14.4	2.47	15.4	2.69	16.4	2.95	16.8	2.98	17.1	3.00
		20	10.4	1.73	12.4	2.12	14.4	2.62	15.4	2.89	16.2	3.09	16.5	3.12	16.9	3.15
		21	10.4	1.75	12.4	2.18	14.4	2.71	15.4	2.99	16.0	3.17	16.4	3.19	16.8	3.22
		23	10.4	1.83	12.4	2.34	14.4	2.90	15.4	3.21	15.8	3.31	16.2	3.34	16.6	3.37
		25	10.4	1.96	12.4	2.50	14.4	3.11	15.4	3.44	15.6	3.46	16.0	3.49	16.3	3.52
		27	10.4	2.09	12.4	2.67	14.4	3.33	15.2	3.59	15.4	3.60	15.7	3.63	16.1	3.67
		29	10.4	2.23	12.4	2.85	14.4	3.55	14.9	3.73	15.1	3.75	15.5	3.78	15.9	3.82
		31	10.4	2.37	12.4	3.04	14.4	3.80	14.7	3.88	14.9	3.89	15.3	3.93	15.7	3.97
		33	10.4	2.52	12.4	3.24	14.3	4.00	14.5	4.02	14.7	4.04	15.1	4.08	15.4	4.12
		35	10.4	2.68	12.4	3.45	14.1	4.15	14.3	4.17	14.4	4.19	14.8	4.23	15.2	4.27
		37	10.4	2.85	12.4	3.68	13.8	4.29	14.0	4.32	14.2	4.34	14.6	4.38	15.0	4.42
		39	10.4	3.03	12.4	3.92	13.6	4.44	13.8	4.46	14.0	4.49	14.4	4.53	14.7	4.58
100%	125	10	9.45	1.43	11.3	1.73	13.1	2.05	14.0	2.21	14.9	2.38	16.7	2.72	17.7	2.82
		12	9.45	1.45	11.3	1.76	13.1	2.09	14.0	2.26	14.9	2.43	16.7	2.77	17.5	2.80
		14	9.45	1.48	11.3	1.79	13.1	2.13	14.0	2.30	14.9	2.47	16.7	2.83	17.2	2.79
		16	9.45	1.50	11.3	1.83	13.1	2.17	14.0	2.34	14.9	2.52	16.7	2.86	17.0	2.83
		18	9.45	1.53	11.3	1.86	13.1	2.21	14.0	2.39	14.9	2.57	16.4	2.96	16.8	2.98
		20	9.45	1.56	11.3	1.90	13.1	2.28	14.0	2.51	14.9	2.75	16.2	3.10	16.6	3.12
		21	9.45	1.58	11.3	1.92	13.1	2.36	14.0	2.60	14.9	2.85	16.1	3.17	16.4	3.20
		23	9.45	1.62	11.3	2.05	13.1	2.53	14.0	2.79	14.9	3.06	15.9	3.32	16.2	3.34
		25	9.45	1.73	11.3	2.19	13.1	2.70	14.0	2.98	14.9	3.28	15.6	3.46	16.0	3.49
		27	9.45	1.84	11.3	2.33	13.1	2.89	14.0	3.19	14.9	3.51	15.4	3.61	15.8	3.64
		29	9.45	1.96	11.3	2.49	13.1	3.09	14.0	3.41	14.9	3.72	15.2	3.75	15.5	3.78
		31	9.45	2.09	11.3	2.65	13.1	3.29	14.0	3.64	14.6	3.87	15.0	3.90	15.3	3.93
		33	9.45	2.22	11.3	2.83	13.1	3.51	14.0	3.88	14.4	4.01	14.7	4.05	15.1	4.08
		35	9.45	2.36	11.3	3.01	13.1	3.74	14.0	4.14	14.2	4.16	14.5	4.19	14.9	4.23
		37	9.45	2.50	11.3	3.20	13.1	3.99	13.8	4.29	13.9	4.31	14.3	4.34	14.6	4.38
		39	9.45	2.66	11.3	3.41	13.1	4.25	13.5	4.43	13.7	4.45	14.1	4.49	14.4	4.53
90%	112.5	10	8.50	1.28	10.1	1.54	11.8	1.82	12.6	1.96	13.4	2.11	15.1	2.41	16.7	2.72
		12	8.50	1.30	10.1	1.57	11.8	1.85	12.6	2.00	13.4	2.15	15.1	2.45	16.7	2.77
		14	8.50	1.32	10.1	1.60	11.8	1.89	12.6	2.04	13.4	2.19	15.1	2.50	16.7	2.82
		16	8.50	1.34	10.1	1.63	11.8	1.92	12.6	2.08	13.4	2.23	15.1	2.55	16.7	2.87
		18	8.50	1.37	10.1	1.66	11.8	1.96	12.6	2.12	13.4	2.28	15.1	2.60	16.4	2.96
		20	8.50	1.39	10.1	1.69	11.8	2.00	12.6	2.16	13.4	2.36	15.1	2.80	16.2	3.10
		21	8.50	1.41	10.1	1.70	11.8	2.03	12.6	2.23	13.4	2.45	15.1	2.90	16.1	3.17
		23	8.50	1.43	10.1	1.78	11.8	2.18	12.6	2.39	13.4	2.62	15.1	3.11	15.9	3.32
		25	8.50	1.51	10.1	1.90	11.8	2.33	12.6	2.56	13.4	2.80	15.1	3.33	15.6	3.46
		27	8.50	1.61	10.1	2.02	11.8	2.48	12.6	2.73	13.4	3.00	15.1	3.56	15.4	3.61
		29	8.50	1.71	10.1	2.15	11.8	2.65	12.6	2.92	13.4	3.20	14.9	3.72	15.2	3.75
		31	8.50	1.82	10.1	2.29	11.8	2.83	12.6	3.11	13.4	3.42	14.7	3.87	15.0	3.90
		33	8.50	1.93	10.1	2.44	11.8	3.01	12.6	3.32	13.4	3.64	14.4	4.01	14.7	4.05
		35	8.50	2.05	10.1	2.60	11.8	3.21	12.6	3.54	13.4	3.88	14.2	4.16	14.5	4.19
		37	8.50	2.18	10.1	2.76	11.8	3.41	12.6	3.77	13.4	4.14	14.0	4.31	14.3	4.34
		39	8.50	2.31	10.1	2.93	11.8	3.63	12.6	4.01	13.4	4.41	13.7	4.46	14.0	4.49

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3 Capacity tables

3 - 1 Cooling capacity tables

5HP

TC: Total capacity: kW ; PI: Power input: kW (Comp. + Outdoor fan motor)

Combination (%)	Capacity index	Outdoor air temp. °CDB	Indoor air temperature: °CWB													
			14.0		16.0		18.0		19.0		20.0		22.0		24.0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
			kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	100	10	7.56	1.13	9.02	1.36	10.5	1.59	11.2	1.72	11.9	1.84	13.4	2.10	14.8	2.37
		12	7.56	1.15	9.02	1.38	10.5	1.62	11.2	1.75	11.9	1.88	13.4	2.14	14.8	2.41
		14	7.56	1.17	9.02	1.40	10.5	1.65	11.2	1.78	11.9	1.91	13.4	2.18	14.8	2.46
		16	7.56	1.19	9.02	1.43	10.5	1.68	11.2	1.82	11.9	1.95	13.4	2.23	14.8	2.51
		18	7.56	1.21	9.02	1.46	10.5	1.72	11.2	1.85	11.9	1.99	13.4	2.27	14.8	2.56
		20	7.56	1.23	9.02	1.48	10.5	1.75	11.2	1.89	11.9	2.03	13.4	2.35	14.8	2.74
		21	7.56	1.24	9.02	1.50	10.5	1.77	11.2	1.91	11.9	2.07	13.4	2.44	14.8	2.83
		23	7.56	1.27	9.02	1.53	10.5	1.85	11.2	2.03	11.9	2.21	13.4	2.61	14.8	3.04
		25	7.56	1.31	9.02	1.63	10.5	1.98	11.2	2.17	11.9	2.37	13.4	2.79	14.8	3.25
		27	7.56	1.39	9.02	1.73	10.5	2.11	11.2	2.31	11.9	2.53	13.4	2.99	14.8	3.48
		29	7.56	1.48	9.02	1.84	10.5	2.25	11.2	2.47	11.9	2.70	13.4	3.19	14.8	3.72
		31	7.56	1.57	9.02	1.96	10.5	2.40	11.2	2.63	11.9	2.88	13.4	3.40	14.6	3.87
		33	7.56	1.67	9.02	2.08	10.5	2.55	11.2	2.80	11.9	3.07	13.4	3.63	14.4	4.01
		35	7.56	1.77	9.02	2.21	10.5	2.71	11.2	2.98	11.9	3.26	13.4	3.87	14.2	4.16
		37	7.56	1.87	9.02	2.35	10.5	2.88	11.2	3.17	11.9	3.48	13.4	4.12	13.9	4.30
		39	7.56	1.98	9.02	2.50	10.5	3.07	11.2	3.38	11.9	3.70	13.4	4.39	13.7	4.45
70%	87.5	10	6.61	1.00	7.89	1.18	9.16	1.38	9.80	1.48	10.4	1.59	11.7	1.81	13.0	2.03
		12	6.61	1.01	7.89	1.20	9.16	1.40	9.80	1.51	10.4	1.62	11.7	1.84	13.0	2.07
		14	6.61	1.03	7.89	1.22	9.16	1.43	9.80	1.54	10.4	1.65	11.7	1.87	13.0	2.11
		16	6.61	1.04	7.89	1.24	9.16	1.46	9.80	1.57	10.4	1.68	11.7	1.91	13.0	2.15
		18	6.61	1.06	7.89	1.27	9.16	1.48	9.80	1.59	10.4	1.71	11.7	1.95	13.0	2.19
		20	6.61	1.08	7.89	1.29	9.16	1.51	9.80	1.63	10.4	1.74	11.7	1.99	13.0	2.25
		21	6.61	1.09	7.89	1.30	9.16	1.52	9.80	1.64	10.4	1.76	11.7	2.02	13.0	2.33
		23	6.61	1.11	7.89	1.32	9.16	1.56	9.80	1.70	10.4	1.84	11.7	2.16	13.0	2.50
		25	6.61	1.13	7.89	1.38	9.16	1.66	9.80	1.81	10.4	1.97	11.7	2.31	13.0	2.67
		27	6.61	1.19	7.89	1.46	9.16	1.77	9.80	1.93	10.4	2.10	11.7	2.46	13.0	2.86
		29	6.61	1.26	7.89	1.56	9.16	1.88	9.80	2.06	10.4	2.24	11.7	2.63	13.0	3.05
		31	6.61	1.34	7.89	1.65	9.16	2.00	9.80	2.19	10.4	2.39	11.7	2.80	13.0	3.25
		33	6.61	1.42	7.89	1.76	9.16	2.13	9.80	2.33	10.4	2.54	11.7	2.99	13.0	3.47
		35	6.61	1.50	7.89	1.86	9.16	2.26	9.80	2.48	10.4	2.70	11.7	3.18	13.0	3.70
		37	6.61	1.59	7.89	1.98	9.16	2.40	9.80	2.63	10.4	2.87	11.7	3.38	13.0	3.94
		39	6.61	1.69	7.89	2.09	9.16	2.55	9.80	2.80	10.4	3.05	11.7	3.60	13.0	4.20
60%	75	10	5.67	0.87	6.76	1.02	7.85	1.18	8.40	1.26	8.95	1.35	10.0	1.52	11.1	1.71
		12	5.67	0.88	6.76	1.03	7.85	1.20	8.40	1.28	8.95	1.37	10.0	1.55	11.1	1.74
		14	5.67	0.89	6.76	1.05	7.85	1.22	8.40	1.30	8.95	1.39	10.0	1.58	11.1	1.77
		16	5.67	0.91	6.76	1.07	7.85	1.24	8.40	1.33	8.95	1.42	10.0	1.61	11.1	1.80
		18	5.67	0.92	6.76	1.08	7.85	1.26	8.40	1.35	8.95	1.44	10.0	1.64	11.1	1.84
		20	5.67	0.93	6.76	1.10	7.85	1.28	8.40	1.38	8.95	1.47	10.0	1.67	11.1	1.87
		21	5.67	0.94	6.76	1.11	7.85	1.29	8.40	1.39	8.95	1.49	10.0	1.69	11.1	1.89
		23	5.67	0.96	6.76	1.13	7.85	1.32	8.40	1.41	8.95	1.51	10.0	1.75	11.1	2.01
		25	5.67	0.97	6.76	1.15	7.85	1.37	8.40	1.49	8.95	1.61	10.0	1.87	11.1	2.15
		27	5.67	1.01	6.76	1.22	7.85	1.46	8.40	1.58	8.95	1.71	10.0	1.99	11.1	2.29
		29	5.67	1.07	6.76	1.30	7.85	1.55	8.40	1.68	8.95	1.82	10.0	2.12	11.1	2.45
		31	5.67	1.13	6.76	1.38	7.85	1.65	8.40	1.79	8.95	1.94	10.0	2.26	11.1	2.61
		33	5.67	1.20	6.76	1.46	7.85	1.75	8.40	1.90	8.95	2.06	10.0	2.41	11.1	2.78
		35	5.67	1.26	6.76	1.54	7.85	1.85	8.40	2.02	8.95	2.19	10.0	2.56	11.1	2.96
		37	5.67	1.34	6.76	1.63	7.85	1.96	8.40	2.14	8.95	2.33	10.0	2.72	11.1	3.15
		39	5.67	1.41	6.76	1.73	7.85	2.08	8.40	2.27	8.95	2.47	10.0	2.89	11.1	3.35
50%	62.5	10	4.72	0.75	5.63	0.86	6.54	0.99	7.00	1.05	7.46	1.12	8.37	1.26	9.28	1.40
		12	4.72	0.75	5.63	0.87	6.54	1.00	7.00	1.07	7.46	1.14	8.37	1.28	9.28	1.42
		14	4.72	0.76	5.63	0.89	6.54	1.02	7.00	1.09	7.46	1.15	8.37	1.30	9.28	1.45
		16	4.72	0.78	5.63	0.90	6.54	1.03	7.00	1.10	7.46	1.17	8.37	1.32	9.28	1.47
		18	4.72	0.79	5.63	0.91	6.54	1.05	7.00	1.12	7.46	1.19	8.37	1.35	9.28	1.50
		20	4.72	0.80	5.63	0.93	6.54	1.07	7.00	1.14	7.46	1.22	8.37	1.37	9.28	1.53
		21	4.72	0.80	5.63	0.94	6.54	1.08	7.00	1.15	7.46	1.23	8.37	1.38	9.28	1.54
		23	4.72	0.81	5.63	0.95	6.54	1.10	7.00	1.17	7.46	1.25	8.37	1.41	9.28	1.58
		25	4.72	0.83	5.63	0.97	6.54	1.12	7.00	1.20	7.46	1.29	8.37	1.48	9.28	1.69
		27	4.72	0.84	5.63	1.00	6.54	1.18	7.00	1.27	7.46	1.37	8.37	1.57	9.28	1.80
		29	4.72	0.89	5.63	1.06	6.54	1.25	7.00	1.35	7.46	1.45	8.37	1.68	9.28	1.91
		31	4.72	0.94	5.63	1.12	6.54	1.32	7.00	1.43	7.46	1.54	8.37	1.78	9.28	2.03
		33	4.72	0.99	5.63	1.19	6.54	1.40	7.00	1.52	7.46	1.64	8.37	1.89	9.28	2.16
		35	4.72	1.05	5.63	1.26	6.54	1.49	7.00	1.61	7.46	1.74	8.37	2.01	9.28	2.30
		37	4.72	1.10	5.63	1.33	6.54	1.57	7.00	1.70	7.46	1.84	8.37	2.13	9.28	2.44
		39	4.72	1.16	5.63	1.40	6.54	1.66	7.00	1.80	7.46	1.95	8.37	2.26	9.28	2.59

NOTES

1 The above table shows the average value of conditions which may occur.

3

3 Capacity tables

3 - 1 Cooling capacity tables

8HP

TC: Total capacity: kW ; PI: Power input: kW (Comp. + Outdoor fan motor)

Combination (%)	Capacity index	Outdoor air temp. °CDB	Indoor air temperature: °CWB													
			14,0		16,0		18,0		19,0		20,0		22,0		24,0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
			kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	260	10	19.7	2.73	23.4	3.34	27.2	3.97	28.2	4.05	28.6	3.97	29.3	3.80	30.0	3.63
		12	19.7	2.78	23.4	3.40	27.2	4.04	27.8	4.03	28.2	3.95	28.9	3.78	29.6	3.72
		14	19.7	2.83	23.4	3.46	27.1	4.09	27.5	4.01	27.8	3.92	28.5	3.89	29.3	3.93
		16	19.7	2.88	23.4	3.53	26.8	4.07	27.1	4.05	27.5	4.06	28.2	4.10	28.9	4.14
		18	19.7	2.94	23.4	3.60	26.4	4.23	26.8	4.25	27.1	4.27	27.8	4.31	28.5	4.36
		20	19.7	3.00	23.4	3.84	26.0	4.44	26.4	4.46	26.7	4.48	27.5	4.53	28.2	4.57
		21	19.7	3.08	23.4	3.98	25.9	4.54	26.2	4.56	26.6	4.59	27.3	4.63	28.0	4.68
		23	19.7	3.30	23.4	4.26	25.5	4.75	25.8	4.77	26.2	4.80	26.9	4.84	27.6	4.89
		25	19.7	3.53	23.4	4.56	25.1	4.96	25.5	4.98	25.8	5.01	26.5	5.06	27.3	5.11
		27	19.7	3.77	23.4	4.88	24.8	5.16	25.1	5.19	25.5	5.22	26.2	5.27	26.9	5.33
		29	19.7	4.02	23.4	5.22	24.4	5.37	24.8	5.40	25.1	5.43	25.8	5.49	26.5	5.55
		31	19.7	4.29	23.3	5.52	24.0	5.58	24.4	5.61	24.7	5.64	25.4	5.71	26.2	5.77
		33	19.7	4.57	23.0	5.73	23.7	5.79	24.0	5.83	24.4	5.86	25.1	5.92	25.8	5.99
		35	19.7	4.87	22.6	5.94	23.3	6.01	23.7	6.04	24.0	6.07	24.7	6.14	25.4	6.21
		37	19.7	5.19	22.2	6.15	22.9	6.22	23.3	6.26	23.6	6.29	24.4	6.36	25.1	6.44
		39	19.7	5.52	21.9	6.36	22.6	6.43	22.9	6.47	23.3	6.51	24.0	6.59	24.7	6.66
120%	240	10	18.1	2.49	21.6	3.04	25.1	3.62	26.9	3.91	28.1	4.07	28.8	3.92	29.4	3.77
		12	18.1	2.54	21.6	3.10	25.1	3.69	26.9	3.98	27.8	4.05	28.4	3.90	29.1	3.74
		14	18.1	2.58	21.6	3.16	25.1	3.76	26.9	4.06	27.4	4.03	28.0	3.87	28.7	3.90
		16	18.1	2.63	21.6	3.22	25.1	3.83	26.7	4.09	27.0	4.04	27.7	4.08	28.3	4.11
		18	18.1	2.68	21.6	3.28	25.1	3.96	26.3	4.23	26.7	4.25	27.3	4.28	28.0	4.32
		20	18.1	2.74	21.6	3.41	25.1	4.26	26.0	4.43	26.3	4.45	27.0	4.49	27.6	4.54
		21	18.1	2.76	21.6	3.54	25.1	4.41	25.8	4.54	26.1	4.56	26.8	4.60	27.4	4.64
		23	18.1	2.95	21.6	3.79	25.1	4.72	25.4	4.74	25.8	4.77	26.4	4.81	27.1	4.85
		25	18.1	3.15	21.6	4.05	24.7	4.93	25.1	4.95	25.4	4.97	26.0	5.02	26.7	5.07
		27	18.1	3.37	21.6	4.33	24.4	5.13	24.7	5.16	25.0	5.18	25.7	5.23	26.3	5.28
		29	18.1	3.59	21.6	4.63	24.0	5.34	24.3	5.37	24.7	5.39	25.3	5.45	26.0	5.50
		31	18.1	3.83	21.6	4.94	23.6	5.55	24.0	5.58	24.3	5.61	24.9	5.66	25.6	5.72
		33	18.1	4.08	21.6	5.27	23.3	5.76	23.6	5.79	23.9	5.82	24.6	5.88	25.2	5.94
		35	18.1	4.34	21.6	5.62	22.9	5.97	23.2	6.00	23.6	6.03	24.2	6.09	24.9	6.16
		37	18.1	4.62	21.6	5.99	22.5	6.18	22.9	6.21	23.2	6.25	23.9	6.31	24.5	6.38
		39	18.1	4.91	21.5	6.32	22.2	6.39	22.5	6.43	22.8	6.46	23.5	6.53	24.1	6.60
110%	220	10	16.6	2.26	19.8	2.75	23.0	3.27	24.6	3.54	26.2	3.80	28.3	4.04	28.9	3.90
		12	16.6	2.30	19.8	2.81	23.0	3.33	24.6	3.60	26.2	3.88	27.9	4.02	28.5	3.87
		14	16.6	2.34	19.8	2.86	23.0	3.40	24.6	3.67	26.2	3.95	27.5	4.00	28.1	3.87
		16	16.6	2.39	19.8	2.91	23.0	3.46	24.6	3.74	26.2	4.03	27.2	4.05	27.8	4.08
		18	16.6	2.43	19.8	2.97	23.0	3.53	24.6	3.85	26.2	4.22	26.8	4.26	27.4	4.29
		20	16.6	2.48	19.8	3.03	23.0	3.74	24.6	4.13	25.9	4.43	26.5	4.46	27.1	4.50
		21	16.6	2.51	19.8	3.12	23.0	3.87	24.6	4.28	25.7	4.53	26.3	4.57	26.9	4.61
		23	16.6	2.62	19.8	3.34	23.0	4.15	24.6	4.59	25.3	4.73	25.9	4.78	26.5	4.82
		25	16.6	2.80	19.8	3.58	23.0	4.45	24.6	4.92	24.9	4.94	25.5	4.99	26.1	5.03
		27	16.6	2.99	19.8	3.82	23.0	4.76	24.3	5.13	24.6	5.15	25.2	5.20	25.8	5.24
		29	16.6	3.18	19.8	4.08	23.0	5.08	23.9	5.33	24.2	5.36	24.8	5.41	25.4	5.46
		31	16.6	3.39	19.8	4.35	23.0	5.43	23.5	5.54	23.8	5.57	24.4	5.62	25.0	5.67
		33	16.6	3.61	19.8	4.63	22.9	5.72	23.2	5.75	23.5	5.78	24.1	5.83	24.7	5.89
		35	16.6	3.84	19.8	4.94	22.5	5.93	22.8	5.96	23.1	5.99	23.7	6.05	24.3	6.10
		37	16.6	4.08	19.8	5.26	22.2	6.14	22.5	6.17	22.8	6.20	23.4	6.26	24.0	6.32
		39	16.6	4.34	19.8	5.60	21.8	6.35	22.1	6.38	22.4	6.41	23.0	6.48	23.6	6.54
100%	200	10	15.1	2.04	18.0	2.47	20.9	2.93	22.4	3.17	23.9	3.41	26.8	3.89	28.3	4.03
		12	15.1	2.08	18.0	2.52	20.9	2.99	22.4	3.23	23.9	3.47	26.8	3.97	28.0	4.01
		14	15.1	2.11	18.0	2.57	20.9	3.04	22.4	3.29	23.9	3.54	26.8	4.04	27.6	3.99
		16	15.1	2.15	18.0	2.61	20.9	3.10	22.4	3.35	23.9	3.61	26.7	4.10	27.2	4.05
		18	15.1	2.19	18.0	2.66	20.9	3.16	22.4	3.42	23.9	3.68	26.3	4.23	26.9	4.26
		20	15.1	2.23	18.0	2.72	20.9	3.26	22.4	3.59	23.9	3.94	26.0	4.43	26.5	4.47
		21	15.1	2.25	18.0	2.74	20.9	3.37	22.4	3.72	23.9	4.08	25.8	4.53	26.3	4.57
		23	15.1	2.31	18.0	2.93	20.9	3.61	22.4	3.99	23.9	4.38	25.4	4.74	25.9	4.78
		25	15.1	2.47	18.0	3.13	20.9	3.87	22.4	4.27	23.9	4.69	25.0	4.95	25.6	4.99
		27	15.1	2.63	18.0	3.34	20.9	4.13	22.4	4.56	23.9	5.01	24.7	5.16	25.2	5.20
		29	15.1	2.80	18.0	3.56	20.9	4.41	22.4	4.87	23.8	5.32	24.3	5.37	24.9	5.41
		31	15.1	2.98	18.0	3.79	20.9	4.71	22.4	5.20	23.4	5.53	23.9	5.58	24.5	5.62
		33	15.1	3.17	18.0	4.04	20.9	5.02	22.4	5.55	23.0	5.74	23.6	5.79	24.1	5.84
		35	15.1	3.37	18.0	4.30	20.9	5.35	22.4	5.92	22.7	5.95	23.2	6.00	23.8	6.05
		37	15.1	3.58	18.0	4.58	20.9	5.70	22.0	6.13	22.3	6.16	22.9	6.21	23.4	6.27
		39	15.1	3.80	18.0	4.87	20.9	6.07	21.7	6.34	21.9	6.37	22.5	6.43	23.0	6.48
90%	180	10	13.6	1.83	16.2	2.20	18.8	2.60	20.2	2.81	21.5	3.02	24.1	3.44	26.7	3.88
		12	13.6	1.86	16.2	2.24	18.8	2.65	20.2	2.86	21.5	3.07	24.1	3.51	26.7	3.96
		14	13.6	1.89	16.2	2.28	18.8	2.70	20.2	2.91	21.5	3.13	24.1	3.58	26.7	4.03
		16	13.6	1.92	16.2	2.32	18.8	2.75	20.2	2.97	21.5	3.19	24.1	3.65	26.7	4.10
		18	13.6	1.96	16.2	2.37	18.8	2.80	20.2	3.03	21.5	3.25	24.1	3.72	26.3	4.23
		20	13.6	1.99	16.2	2.41	18.8	2.86	20.2	3.09	21.5	3.38	24.1	4.00	25.9	4.43
		21	13.6	2.01	16.2	2.44	18.8	2.91	20.2	3.20	21.5	3.50	24.1	4.14	25.8	4.53
		23	13.6	2.05	16.2	2.54	18.8	3.11	20.2	3.42	21.5	3.75	24.1	4.44	25.4	4.74
		25	13.6	2.16	16.2	2.71	18.8	3.33	20.2	3.66	21.5	4.01	24.1	4.76	25.0	4.95
		27	13.6	2.30	16.2	2.89	18.8	3.55	20.2	3.91	21.5	4.29	24.1	5.09	24.7	5.16
		29	13.6	2.45	16.2	3.08	18.8	3.79	20.2	4.17	21.5	4.58	23.8	5.33	24.3	5.37
		31	13.6	2.60	16.2	3.28	18.8	4.04	20.2	4.45	21.5	4.88	23.4	5.53	23.9	5.58
		33	13.6	2.76	16.2	3.49	18.8	4.31	20.2	4.75	21.5	5.21	23.1	5.74	23.6	5.79
		35	13.6	2.93	16.2	3.71	18.8	4.59	20.2	5.06	21.5	5.55	22.7	5.95	23.2	6.00
		37	13.6	3.11	16.2	3.95	18.8	4.88	20.2	5.39	21.5	5.92	22.4	6.16	22.8	6.21
		39	13.6	3.30	16.2	4.19	18.8	5.19	20.2	5.74	21.5	6.31	22.0	6.37	22.5	6.42

3 Capacity tables

3 - 1 Cooling capacity tables

8HP

TC: Total capacity: kW ; PI: Power input: kW (Comp. + Outdoor fan motor)

Combination (%)	Capacity index	Outdoor air temp. °CDB	Indoor air temperature: °CWB 14,0		16,0		18,0		19,0		20,0		22,0		24,0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
			kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
80%	160	10	12.1	1.62	14.4	1.94	16.8	2.28	17.9	2.46	19.1	2.64	21.4	3.01	23.7	3.39
		12	12.1	1.65	14.4	1.97	16.8	2.32	17.9	2.50	19.1	2.69	21.4	3.06	23.7	3.45
		14	12.1	1.67	14.4	2.01	16.8	2.36	17.9	2.55	19.1	2.74	21.4	3.12	23.7	3.52
		16	12.1	1.70	14.4	2.04	16.8	2.41	17.9	2.60	19.1	2.79	21.4	3.18	23.7	3.59
		18	12.1	1.73	14.4	2.08	16.8	2.45	17.9	2.65	19.1	2.84	21.4	3.24	23.7	3.66
		20	12.1	1.76	14.4	2.12	16.8	2.50	17.9	2.70	19.1	2.90	21.4	3.36	23.7	3.91
		21	12.1	1.78	14.4	2.14	16.8	2.53	17.9	2.73	19.1	2.96	21.4	3.48	23.7	4.05
		23	12.1	1.81	14.4	2.18	16.8	2.65	17.9	2.90	19.1	3.17	21.4	3.73	23.7	4.35
		25	12.1	1.87	14.4	2.32	16.8	2.83	17.9	3.10	19.1	3.39	21.4	3.99	23.7	4.65
		27	12.1	1.99	14.4	2.48	16.8	3.02	17.9	3.31	19.1	3.62	21.4	4.27	23.7	4.98
		29	12.1	2.11	14.4	2.64	16.8	3.22	17.9	3.53	19.1	3.86	21.4	4.56	23.7	5.32
		31	12.1	2.24	14.4	2.80	16.8	3.43	17.9	3.76	19.1	4.11	21.4	4.87	23.4	5.53
		33	12.1	2.38	14.4	2.98	16.8	3.65	17.9	4.01	19.1	4.38	21.4	5.19	23.0	5.74
		35	12.1	2.53	14.4	3.17	16.8	3.88	17.9	4.26	19.1	4.67	21.4	5.53	22.7	5.94
		37	12.1	2.68	14.4	3.36	16.8	4.13	17.9	4.54	19.1	4.97	21.4	5.90	22.3	6.15
		39	12.1	2.84	14.4	3.57	16.8	4.39	17.9	4.83	19.1	5.29	21.4	6.28	21.9	6.36
70%	140	10	10.6	1.43	12.6	1.69	14.7	1.97	15.7	2.12	16.7	2.27	18.7	2.58	20.8	2.90
		12	10.6	1.45	12.6	1.72	14.7	2.01	15.7	2.16	16.7	2.31	18.7	2.63	20.8	2.96
		14	10.6	1.47	12.6	1.75	14.7	2.04	15.7	2.20	16.7	2.36	18.7	2.68	20.8	3.01
		16	10.6	1.49	12.6	1.78	14.7	2.08	15.7	2.24	16.7	2.40	18.7	2.73	20.8	3.07
		18	10.6	1.52	12.6	1.81	14.7	2.12	15.7	2.28	16.7	2.44	18.7	2.78	20.8	3.13
		20	10.6	1.54	12.6	1.84	14.7	2.16	15.7	2.32	16.7	2.49	18.7	2.84	20.8	3.22
		21	10.6	1.56	12.6	1.86	14.7	2.18	15.7	2.35	16.7	2.52	18.7	2.88	20.8	3.34
		23	10.6	1.58	12.6	1.89	14.7	2.22	15.7	2.43	16.7	2.64	18.7	3.09	20.8	3.57
		25	10.6	1.61	12.6	1.97	14.7	2.37	15.7	2.59	16.7	2.82	18.7	3.30	20.8	3.82
		27	10.6	1.70	12.6	2.09	14.7	2.53	15.7	2.76	16.7	3.00	18.7	3.52	20.8	4.08
		29	10.6	1.81	12.6	2.23	14.7	2.69	15.7	2.94	16.7	3.20	18.7	3.76	20.8	4.36
		31	10.6	1.92	12.6	2.37	14.7	2.86	15.7	3.13	16.7	3.41	18.7	4.01	20.8	4.65
		33	10.6	2.03	12.6	2.51	14.7	3.04	15.7	3.33	16.7	3.63	18.7	4.27	20.8	4.96
		35	10.6	2.15	12.6	2.66	14.7	3.23	15.7	3.54	16.7	3.86	18.7	4.55	20.8	5.29
		37	10.6	2.28	12.6	2.83	14.7	3.43	15.7	3.76	16.7	4.11	18.7	4.84	20.8	5.63
		39	10.6	2.41	12.6	3.00	14.7	3.65	15.7	4.00	16.7	4.37	18.7	5.15	20.8	6.00
60%	120	10	9.1	1.24	10.8	1.46	12.6	1.68	13.4	1.80	14.3	1.93	16.1	2.18	17.8	2.44
		12	9.1	1.26	10.8	1.48	12.6	1.71	13.4	1.83	14.3	1.96	16.1	2.22	17.8	2.48
		14	9.1	1.28	10.8	1.50	12.6	1.74	13.4	1.86	14.3	1.99	16.1	2.26	17.8	2.53
		16	9.1	1.29	10.8	1.53	12.6	1.77	13.4	1.90	14.3	2.03	16.1	2.30	17.8	2.58
		18	9.1	1.31	10.8	1.55	12.6	1.80	13.4	1.93	14.3	2.07	16.1	2.34	17.8	2.63
		20	9.1	1.34	10.8	1.58	12.6	1.83	13.4	1.97	14.3	2.10	16.1	2.39	17.8	2.68
		21	9.1	1.35	10.8	1.59	12.6	1.85	13.4	1.99	14.3	2.12	16.1	2.41	17.8	2.71
		23	9.1	1.37	10.8	1.62	12.6	1.88	13.4	2.02	14.3	2.17	16.1	2.50	17.8	2.88
		25	9.1	1.39	10.8	1.65	12.6	1.96	13.4	2.13	14.3	2.30	16.1	2.67	17.8	3.07
		27	9.1	1.44	10.8	1.75	12.6	2.08	13.4	2.26	14.3	2.45	16.1	2.85	17.8	3.28
		29	9.1	1.53	10.8	1.85	12.6	2.21	13.4	2.41	14.3	2.61	16.1	3.04	17.8	3.50
		31	9.1	1.62	10.8	1.97	12.6	2.35	13.4	2.56	14.3	2.78	16.1	3.23	17.8	3.73
		33	9.1	1.71	10.8	2.08	12.6	2.50	13.4	2.72	14.3	2.95	16.1	3.44	17.8	3.97
		35	9.1	1.81	10.8	2.21	12.6	2.65	13.4	2.89	14.3	3.13	16.1	3.66	17.8	4.23
		37	9.1	1.91	10.8	2.34	12.6	2.81	13.4	3.06	14.3	3.33	16.1	3.89	17.8	4.50
		39	9.1	2.02	10.8	2.47	12.6	2.98	13.4	3.25	14.3	3.53	16.1	4.13	17.8	4.78
50%	100	10	7.56	1.07	9.0	1.23	10.5	1.41	11.2	1.50	11.9	1.60	13.4	1.80	14.8	2.00
		12	7.56	1.08	9.0	1.25	10.5	1.43	11.2	1.53	11.9	1.62	13.4	1.83	14.8	2.03
		14	7.56	1.09	9.0	1.27	10.5	1.46	11.2	1.55	11.9	1.65	13.4	1.86	14.8	2.07
		16	7.56	1.11	9.0	1.29	10.5	1.48	11.2	1.58	11.9	1.68	13.4	1.89	14.8	2.11
		18	7.56	1.12	9.0	1.31	10.5	1.50	11.2	1.60	11.9	1.71	13.4	1.92	14.8	2.15
		20	7.56	1.14	9.0	1.33	10.5	1.53	11.2	1.63	11.9	1.74	13.4	1.96	14.8	2.19
		21	7.56	1.15	9.0	1.34	10.5	1.54	11.2	1.65	11.9	1.75	13.4	1.98	14.8	2.21
		23	7.56	1.17	9.0	1.36	10.5	1.57	11.2	1.68	11.9	1.79	13.4	2.01	14.8	2.26
		25	7.56	1.18	9.0	1.38	10.5	1.60	11.2	1.71	11.9	1.84	13.4	2.12	14.8	2.41
		27	7.56	1.20	9.0	1.43	10.5	1.68	11.2	1.82	11.9	1.96	13.4	2.25	14.8	2.57
		29	7.56	1.27	9.0	1.52	10.5	1.79	11.2	1.93	11.9	2.08	13.4	2.40	14.8	2.74
		31	7.56	1.34	9.0	1.61	10.5	1.89	11.2	2.05	11.9	2.21	13.4	2.55	14.8	2.91
		33	7.56	1.42	9.0	1.70	10.5	2.01	11.2	2.17	11.9	2.34	13.4	2.70	14.8	3.09
		35	7.56	1.50	9.0	1.80	10.5	2.13	11.2	2.30	11.9	2.48	13.4	2.87	14.8	3.29
		37	7.56	1.58	9.0	1.90	10.5	2.25	11.2	2.44	11.9	2.63	13.4	3.05	14.8	3.49
		39	7.56	1.67	9.0	2.01	10.5	2.38	11.2	2.58	11.9	2.79	13.4	3.23	14.8	3.71

NOTES

1 The above table shows the average value of conditions which may occur.

3 Capacity tables

3 - 1 Cooling capacity tables

10HP

TC: Total capacity: kW ; PI: Power input: kW (Comp. + Outdoor fan motor)

Combination (%)	Capacity index	Outdoor air temp. °CDB	Indoor air temperature: °CWB 14,0		16,0		18,0		19,0		20,0		22,0		24,0	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
			kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	325	10	24.6	3.69	29.3	4.51	34.0	5.37	35.3	5.48	35.7	5.37	36.6	5.14	37.5	4.91
		12	24.6	3.76	29.3	4.60	34.0	5.47	34.8	5.45	35.3	5.34	36.1	5.11	37.0	5.03
		14	24.6	3.83	29.3	4.69	33.9	5.54	34.4	5.43	34.8	5.31	35.7	5.27	36.6	5.32
		16	24.6	3.90	29.3	4.78	33.5	5.51	33.9	5.47	34.3	5.50	35.2	5.55	36.1	5.60
		18	24.6	3.98	29.3	4.87	33.0	5.73	33.4	5.75	33.9	5.78	34.8	5.84	35.7	5.89
		20	24.6	4.06	29.3	5.19	32.5	6.00	33.0	6.03	33.4	6.06	34.3	6.12	35.2	6.18
		21	24.6	4.17	29.3	5.38	32.3	6.14	32.8	6.17	33.2	6.20	34.1	6.27	35.0	6.33
		23	24.6	4.46	29.3	5.77	31.9	6.42	32.3	6.46	32.7	6.49	33.6	6.55	34.5	6.62
		25	24.6	4.77	29.3	6.17	31.4	6.70	31.8	6.74	32.3	6.77	33.2	6.84	34.1	6.91
		27	24.6	5.10	29.3	6.60	31.0	6.99	31.4	7.02	31.8	7.06	32.7	7.13	33.6	7.21
		29	24.6	5.44	29.3	7.06	30.5	7.27	30.9	7.31	31.4	7.35	32.3	7.43	33.2	7.50
		31	24.6	5.81	29.2	7.47	30.0	7.55	30.5	7.60	30.9	7.64	31.8	7.72	32.7	7.80
		33	24.6	6.19	28.7	7.75	29.6	7.84	30.0	7.88	30.5	7.93	31.4	8.01	32.2	8.10
		35	24.6	6.59	28.2	8.04	29.1	8.13	29.6	8.17	30.0	8.22	30.9	8.31	31.8	8.40
		37	24.6	7.02	27.8	8.32	28.7	8.42	29.1	8.46	29.6	8.51	30.4	8.61	31.3	8.71
		39	24.6	7.47	27.3	8.60	28.2	8.71	28.7	8.76	29.1	8.81	30.0	8.91	30.9	9.01
120%	300	10	22.7	3.37	27.0	4.12	31.4	4.89	33.6	5.29	35.2	5.51	36.0	5.31	36.8	5.10
		12	22.7	3.43	27.0	4.19	31.4	4.99	33.6	5.39	34.7	5.48	35.5	5.27	36.3	5.06
		14	22.7	3.50	27.0	4.27	31.4	5.08	33.6	5.49	34.2	5.46	35.1	5.24	35.9	5.28
		16	22.7	3.56	27.0	4.36	31.4	5.18	33.4	5.53	33.8	5.47	34.6	5.52	35.4	5.56
		18	22.7	3.63	27.0	4.44	31.4	5.36	32.9	5.72	33.3	5.75	34.1	5.80	35.0	5.85
		20	22.7	3.70	27.0	4.62	31.4	5.76	32.5	6.00	32.9	6.03	33.7	6.08	34.5	6.14
		21	22.7	3.74	27.0	4.78	31.4	5.97	32.2	6.14	32.6	6.17	33.5	6.22	34.3	6.28
		23	22.7	3.99	27.0	5.13	31.4	6.39	31.8	6.42	32.2	6.45	33.0	6.51	33.8	6.57
		25	22.7	4.27	27.0	5.48	30.9	6.67	31.3	6.70	31.7	6.73	32.6	6.79	33.4	6.86
		27	22.7	4.56	27.0	5.86	30.5	6.95	30.9	6.98	31.3	7.01	32.1	7.08	32.9	7.15
		29	22.7	4.86	27.0	6.26	30.0	7.23	30.4	7.26	30.8	7.30	31.6	7.37	32.5	7.44
		31	22.7	5.18	27.0	6.68	29.5	7.51	30.0	7.55	30.4	7.58	31.2	7.66	32.0	7.74
		33	22.7	5.52	27.0	7.13	29.1	7.79	29.5	7.83	29.9	7.87	30.7	7.95	31.5	8.03
		35	22.7	5.87	27.0	7.60	28.6	8.08	29.0	8.12	29.5	8.16	30.3	8.25	31.1	8.33
		37	22.7	6.25	27.0	8.10	28.2	8.36	28.6	8.41	29.0	8.45	29.8	8.54	30.6	8.63
		39	22.7	6.65	26.9	8.55	27.7	8.65	28.1	8.70	28.5	8.74	29.4	8.84	30.2	8.93
110%	275	10	20.8	3.06	24.8	3.73	28.8	4.43	30.8	4.78	32.8	5.15	35.3	5.46	36.1	5.27
		12	20.8	3.12	24.8	3.80	28.8	4.51	30.8	4.87	32.8	5.24	34.9	5.44	35.6	5.24
		14	20.8	3.17	24.8	3.87	28.8	4.60	30.8	4.97	32.8	5.34	34.4	5.41	35.2	5.24
		16	20.8	3.23	24.8	3.94	28.8	4.68	30.8	5.06	32.8	5.45	34.0	5.48	34.7	5.52
		18	20.8	3.29	24.8	4.02	28.8	4.78	30.8	5.20	32.8	5.71	33.5	5.76	34.3	5.81
		20	20.8	3.36	24.8	4.10	28.8	5.06	30.8	5.59	32.3	5.99	33.1	6.04	33.8	6.09
		21	20.8	3.39	24.8	4.22	28.8	5.24	30.8	5.79	32.1	6.13	32.8	6.18	33.6	6.23
		23	20.8	3.55	24.8	4.52	28.8	5.62	30.8	6.21	31.6	6.41	32.4	6.46	33.1	6.52
		25	20.8	3.79	24.8	4.84	28.8	6.02	30.8	6.66	31.2	6.69	31.9	6.75	32.7	6.80
		27	20.8	4.04	24.8	5.17	28.8	6.44	30.3	6.94	30.7	6.97	31.5	7.03	32.2	7.09
		29	20.8	4.31	24.8	5.52	28.8	6.88	29.9	7.22	30.3	7.25	31.0	7.32	31.8	7.38
		31	20.8	4.59	24.8	5.88	28.8	7.34	29.4	7.50	29.8	7.53	30.6	7.60	31.3	7.67
		33	20.8	4.88	24.8	6.27	28.6	7.74	29.0	7.78	29.4	7.82	30.1	7.89	30.9	7.97
		35	20.8	5.19	24.8	6.68	28.1	8.03	28.5	8.06	28.9	8.10	29.6	8.18	30.4	8.26
		37	20.8	5.52	24.8	7.11	27.7	8.31	28.1	8.35	28.4	8.39	29.2	8.47	29.9	8.55
		39	20.8	5.87	24.8	7.57	27.2	8.59	27.6	8.64	28.0	8.68	28.7	8.77	29.5	8.85
100%	250	10	18.9	2.76	22.5	3.35	26.2	3.97	28.0	4.28	29.8	4.61	33.5	5.27	35.4	5.45
		12	18.9	2.81	22.5	3.41	26.2	4.04	28.0	4.36	29.8	4.69	33.5	5.37	34.9	5.42
		14	18.9	2.86	22.5	3.47	26.2	4.12	28.0	4.45	29.8	4.78	33.5	5.47	34.5	5.39
		16	18.9	2.91	22.5	3.54	26.2	4.20	28.0	4.53	29.8	4.88	33.3	5.54	34.0	5.48
		18	18.9	2.96	22.5	3.61	26.2	4.28	28.0	4.62	29.8	4.98	32.9	5.72	33.6	5.76
		20	18.9	3.02	22.5	3.68	26.2	4.41	28.0	4.86	29.8	5.33	32.4	6.00	33.1	6.04
		21	18.9	3.05	22.5	3.71	26.2	4.56	28.0	5.03	29.8	5.52	32.2	6.14	32.9	6.18
		23	18.9	3.13	22.5	3.96	26.2	4.89	28.0	5.39	29.8	5.92	31.8	6.42	32.4	6.47
		25	18.9	3.34	22.5	4.23	26.2	5.23	28.0	5.77	29.8	6.34	31.3	6.70	32.0	6.75
		27	18.9	3.56	22.5	4.52	26.2	5.59	28.0	6.17	29.8	6.78	30.8	6.98	31.5	7.03
		29	18.9	3.79	22.5	4.82	26.2	5.97	28.0	6.59	29.7	7.20	30.4	7.26	31.1	7.32
		31	18.9	4.03	22.5	5.13	26.2	6.37	28.0	7.04	29.3	7.48	29.9	7.54	30.6	7.61
		33	18.9	4.29	22.5	5.47	26.2	6.79	28.0	7.51	28.8	7.76	29.5	7.83	30.2	7.90
		35	18.9	4.56	22.5	5.82	26.2	7.24	28.0	8.01	28.3	8.05	29.0	8.12	29.7	8.19
		37	18.9	4.84	22.5	6.19	26.2	7.71	27.5	8.29	27.9	8.33	28.6	8.40	29.2	8.48
		39	18.9	5.14	22.5	6.59	26.2	8.22	27.1	8.58	27.4	8.61	28.1	8.69	28.8	8.77
90%	225	10	17.0	2.47	20.3	2.98	23.6	3.52	25.2	3.80	26.8	4.08	30.1	4.66	33.4	5.25
		12	17.0	2.51	20.3	3.03	23.6	3.58	25.2	3.87	26.8	4.16	30.1	4.75	33.4	5.35
		14	17.0	2.56	20.3	3.09	23.6	3.65	25.2	3.94	26.8	4.24	30.1	4.84	33.4	5.46
		16	17.0	2.60	20.3	3.14	23.6	3.72	25.2	4.02	26.8	4.32	30.1	4.93	33.3	5.54
		18	17.0	2.65	20.3	3.20	23.6	3.79	25.2	4.10	26.8	4.40	30.1	5.03	32.9	5.72
		20	17.0	2.70	20.3	3.27	23.6	3.87	25.2	4.18	26.8	4.57	30.1	5.41	32.4	6.00
		21	17.0	2.72	20.3	3.30	23.6	3.93	25.2	4.32	26.8	4.73	30.1	5.60	32.2	6.14
		23	17.0	2.77	20.3	3.43	23.6	4.21	25.2	4.63	26.8	5.07	30.1	6.01	31.7	6.41
		25	17.0	2.92	20.3	3.67	23.6	4.50	25.2	4.95	26.8	5.42	30.1	6.43	31.3	6.70
		27	17.0	3.11	20.3	3.91	23.6	4.81	25.2	5.29	26.8	5.80	30.1	6.88	30.8	6.98
		29	17.0	3.31	20.3	4.17	23.6	5.13	25.2	5.65	26.8	6.19	29.8	7.21	30.4	7.26
		31	17.0	3.52	20.3	4.44	23.6	5.47	25.2	6.02	26.8	6.61	29.3	7.49	29.9	7.54
		33	17.0	3.74	20.3	4.72	23.6	5.83	25.2	6.42	26.8	7.05	28.9	7.77	29.5	7.83
		35	17.0	3.97	20.3	5.02	23.6	6.20	25.2	6.84	26.8	7.51	28.4	8.05	29.0	8.11
		37	17.0	4.21	20.3	5.34	23.6	6.60	25.2	7.29	26.8	8.01	27.9	8.34	28.6	8.40
		39	17.0	4.47	20.3	5.67	23.6	7.03	25.2	7.76	26.8	8.53	27.5	8.62	28.1	8.69

3 Capacity tables

3 - 1 Cooling capacity tables

10HP

TC: Total capacity: kW ; PI: Power input: kW (Comp. + Outdoor fan motor)

Combination (%)	Capacity index	Outdoor air temp. °CDB	Indoor air temperature: °CWB 14,0 TC kW	14,0 PI kW	16,0 TC kW	16,0 PI kW	18,0 TC kW	18,0 PI kW	19,0 TC kW	19,0 PI kW	20,0 TC kW	20,0 PI kW	22,0 TC kW	22,0 PI kW	24,0 TC kW	24,0 PI kW
80%	200	10	15.1	2.19	18.0	2.63	20.9	3.09	22.4	3.32	23.9	3.57	26.8	4.07	29.7	4.58
		12	15.1	2.23	18.0	2.67	20.9	3.14	22.4	3.38	23.9	3.63	26.8	4.14	29.7	4.67
		14	15.1	2.27	18.0	2.72	20.9	3.20	22.4	3.45	23.9	3.70	26.8	4.22	29.7	4.76
		16	15.1	2.30	18.0	2.77	20.9	3.26	22.4	3.51	23.9	3.77	26.8	4.31	29.7	4.85
		18	15.1	2.34	18.0	2.82	20.9	3.32	22.4	3.58	23.9	3.85	26.8	4.39	29.7	4.95
		20	15.1	2.39	18.0	2.87	20.9	3.38	22.4	3.65	23.9	3.92	26.8	4.55	29.7	5.29
		21	15.1	2.41	18.0	2.90	20.9	3.42	22.4	3.69	23.9	4.00	26.8	4.71	29.7	5.48
		23	15.1	2.45	18.0	2.95	20.9	3.58	22.4	3.93	23.9	4.28	26.8	5.05	29.7	5.88
		25	15.1	2.53	18.0	3.14	20.9	3.83	22.4	4.20	23.9	4.58	26.8	5.40	29.7	6.30
		27	15.1	2.69	18.0	3.35	20.9	4.08	22.4	4.48	23.9	4.89	26.8	5.78	29.7	6.74
		29	15.1	2.86	18.0	3.57	20.9	4.35	22.4	4.78	23.9	5.22	26.8	6.17	29.7	7.20
		31	15.1	3.04	18.0	3.79	20.9	4.64	22.4	5.09	23.9	5.57	26.8	6.58	29.2	7.48
		33	15.1	3.22	18.0	4.03	20.9	4.93	22.4	5.42	23.9	5.93	26.8	7.02	28.8	7.76
		35	15.1	3.42	18.0	4.28	20.9	5.25	22.4	5.77	23.9	6.32	26.8	7.49	28.3	8.04
		37	15.1	3.62	18.0	4.55	20.9	5.58	22.4	6.14	23.9	6.72	26.8	7.98	27.9	8.33
		39	15.1	3.84	18.0	4.83	20.9	5.93	22.4	6.53	23.9	7.16	26.8	8.50	27.4	8.61
70%	175	10	13.2	1.93	15.8	2.29	18.3	2.67	19.6	2.87	20.9	3.07	23.4	3.49	26.0	3.93
		12	13.2	1.96	15.8	2.33	18.3	2.72	19.6	2.92	20.9	3.13	23.4	3.56	26.0	4.00
		14	13.2	1.99	15.8	2.37	18.3	2.77	19.6	2.97	20.9	3.19	23.4	3.63	26.0	4.08
		16	13.2	2.02	15.8	2.41	18.3	2.82	19.6	3.03	20.9	3.25	23.4	3.69	26.0	4.16
		18	13.2	2.05	15.8	2.45	18.3	2.87	19.6	3.09	20.9	3.31	23.4	3.77	26.0	4.24
		20	13.2	2.09	15.8	2.49	18.3	2.92	19.6	3.14	20.9	3.37	23.4	3.84	26.0	4.36
		21	13.2	2.11	15.8	2.51	18.3	2.95	19.6	3.17	20.9	3.41	23.4	3.90	26.0	4.51
		23	13.2	2.14	15.8	2.56	18.3	3.01	19.6	3.28	20.9	3.57	23.4	4.18	26.0	4.83
		25	13.2	2.18	15.8	2.66	18.3	3.21	19.6	3.50	20.9	3.81	23.4	4.46	26.0	5.17
		27	13.2	2.31	15.8	2.83	18.3	3.42	19.6	3.74	20.9	4.07	23.4	4.77	26.0	5.53
		29	13.2	2.45	15.8	3.01	18.3	3.64	19.6	3.98	20.9	4.33	23.4	5.09	26.0	5.90
		31	13.2	2.59	15.8	3.20	18.3	3.87	19.6	4.24	20.9	4.61	23.4	5.42	26.0	6.30
		33	13.2	2.75	15.8	3.40	18.3	4.12	19.6	4.51	20.9	4.91	23.4	5.78	26.0	6.71
		35	13.2	2.91	15.8	3.60	18.3	4.38	19.6	4.79	20.9	5.22	23.4	6.15	26.0	7.16
		37	13.2	3.08	15.8	3.82	18.3	4.65	19.6	5.09	20.9	5.56	23.4	6.55	26.0	7.62
		39	13.2	3.26	15.8	4.05	18.3	4.93	19.6	5.41	20.9	5.91	23.4	6.97	26.0	8.12
60%	150	10	11.3	1.68	13.5	1.97	15.7	2.28	16.8	2.44	17.9	2.60	20.1	2.95	22.3	3.30
		12	11.3	1.70	13.5	2.00	15.7	2.32	16.8	2.48	17.9	2.65	20.1	3.00	22.3	3.36
		14	11.3	1.73	13.5	2.03	15.7	2.35	16.8	2.52	17.9	2.70	20.1	3.05	22.3	3.42
		16	11.3	1.75	13.5	2.06	15.7	2.40	16.8	2.57	17.9	2.74	20.1	3.11	22.3	3.49
		18	11.3	1.78	13.5	2.10	15.7	2.44	16.8	2.61	17.9	2.79	20.1	3.17	22.3	3.56
		20	11.3	1.81	13.5	2.13	15.7	2.48	16.8	2.66	17.9	2.85	20.1	3.23	22.3	3.63
		21	11.3	1.82	13.5	2.15	15.7	2.50	16.8	2.69	17.9	2.87	20.1	3.26	22.3	3.66
		23	11.3	1.85	13.5	2.19	15.7	2.55	16.8	2.74	17.9	2.93	20.1	3.39	22.3	3.89
		25	11.3	1.88	13.5	2.23	15.7	2.65	16.8	2.88	17.9	3.11	20.1	3.62	22.3	4.16
		27	11.3	1.95	13.5	2.36	15.7	2.82	16.8	3.06	17.9	3.32	20.1	3.86	22.3	4.44
		29	11.3	2.07	13.5	2.51	15.7	3.00	16.8	3.26	17.9	3.53	20.1	4.11	22.3	4.74
		31	11.3	2.19	13.5	2.66	15.7	3.18	16.8	3.46	17.9	3.75	20.1	4.38	22.3	5.05
		33	11.3	2.31	13.5	2.82	15.7	3.38	16.8	3.68	17.9	3.99	20.1	4.66	22.3	5.37
		35	11.3	2.45	13.5	2.99	15.7	3.58	16.8	3.91	17.9	4.24	20.1	4.95	22.3	5.72
		37	11.3	2.59	13.5	3.16	15.7	3.80	16.8	4.14	17.9	4.50	20.1	5.26	22.3	6.09
		39	11.3	2.73	13.5	3.35	15.7	4.03	16.8	4.40	17.9	4.78	20.1	5.59	22.3	6.47
50%	125	10	9.45	1.44	11.3	1.67	13.1	1.91	14.0	2.03	14.9	2.16	16.7	2.43	18.6	2.71
		12	9.45	1.46	11.3	1.69	13.1	1.94	14.0	2.07	14.9	2.20	16.7	2.47	18.6	2.75
		14	9.45	1.48	11.3	1.72	13.1	1.97	14.0	2.10	14.9	2.23	16.7	2.51	18.6	2.80
		16	9.45	1.50	11.3	1.74	13.1	2.00	14.0	2.13	14.9	2.27	16.7	2.56	18.6	2.85
		18	9.45	1.52	11.3	1.77	13.1	2.03	14.0	2.17	14.9	2.31	16.7	2.60	18.6	2.91
		20	9.45	1.54	11.3	1.80	13.1	2.07	14.0	2.21	14.9	2.35	16.7	2.65	18.6	2.96
		21	9.45	1.55	11.3	1.81	13.1	2.08	14.0	2.23	14.9	2.37	16.7	2.67	18.6	2.99
		23	9.45	1.58	11.3	1.84	13.1	2.12	14.0	2.27	14.9	2.42	16.7	2.73	18.6	3.06
		25	9.45	1.60	11.3	1.87	13.1	2.16	14.0	2.31	14.9	2.49	16.7	2.86	18.6	3.26
		27	9.45	1.63	11.3	1.94	13.1	2.28	14.0	2.46	14.9	2.65	16.7	3.05	18.6	3.48
		29	9.45	1.72	11.3	2.05	13.1	2.42	14.0	2.61	14.9	2.81	16.7	3.24	18.6	3.70
		31	9.45	1.82	11.3	2.17	13.1	2.56	14.0	2.77	14.9	2.99	16.7	3.44	18.6	3.94
		33	9.45	1.92	11.3	2.30	13.1	2.72	14.0	2.94	14.9	3.17	16.7	3.66	18.6	4.19
		35	9.45	2.03	11.3	2.43	13.1	2.88	14.0	3.11	14.9	3.36	16.7	3.88	18.6	4.45
		37	9.45	2.14	11.3	2.57	13.1	3.04	14.0	3.30	14.9	3.56	16.7	4.12	18.6	4.72
		39	9.45	2.25	11.3	2.71	13.1	3.22	14.0	3.49	14.9	3.77	16.7	4.37	18.6	5.02

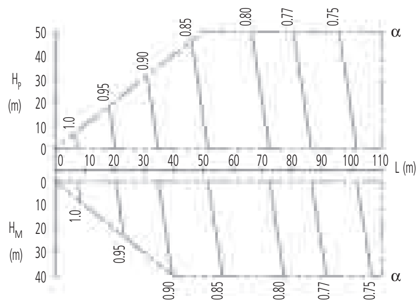
NOTES

1 The above table shows the average value of conditions which may occur.

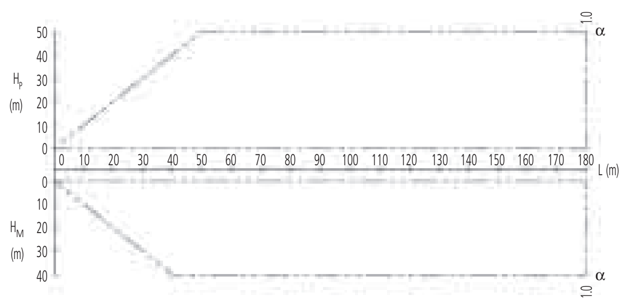
4 Capacity correction factor

RX(Y)Q5M

- Rate of change in cooling capacity



- Rate of change in heating capacity



3D048204A

NOTES

1 These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions.
Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.

2 With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.

3 Method of calculating A/C (cooling / heating) capacity:
The maximum A/C of the system will be either the total A/C capacity of the indoor units obtained from capacity characteristic table or the maximum A/C capacity of outdoor units as mentioned below, whichever smaller.
Calculating A/C capacity of outdoor units

- Condition: Indoor unit combination ratio does not exceed 100%
  Maximum A./C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the 100% combination
  x capacity change rate due to piping length to the farthest indoor unit
- Condition: Indoor unit combination ratio exceeds 100%
  Maximum A./C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the combination
  x capacity change rate due to piping length to the farthest indoor unit

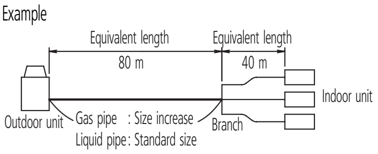
4 When overall equivalent pipe length is 90m or more, the diameter of the main gas and liquid pipes (outdoor unit-branch sections) must be increased.
[Diameter of above case]

Model	gas	liquid
RX(Y)Q5M	ø 19.1	Not increased

5 Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.
Overall equivalent length = (Equivalent length to main pipe) x Correction factor + (Equivalent length after branching)
Choose a correction factor from the following table.
When cooling capacity is calculated: gas pipe size
When heating capacity is calculated: liquid pipe size.

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	-

Example



In the above case
(Cooling) Overall equivalent length = 80m x 0.5 + 40m = 80m
(Heating) Overall equivalent length = 80m x 1.0 + 40m = 120m
The rate of change in cooling capacity when Hp=0m is thus approximately 0.78
The rate of change in heating capacity when Hp=0m is thus approximately 1.0

EXPLANATION OF SYMBOLS

H_p : Level difference (m) between indoor and outdoor units with indoor unit in inferior position
H_M : Level difference (m) between indoor and outdoor units with indoor unit in superior position
L : Equivalent pipe length (m)
α : Rate of change in cooling/heating capacity

Diameter of the main pipes (standard size)

Model	gas	liquid
RX(Y)Q5M	ø 15.9	ø 9.5

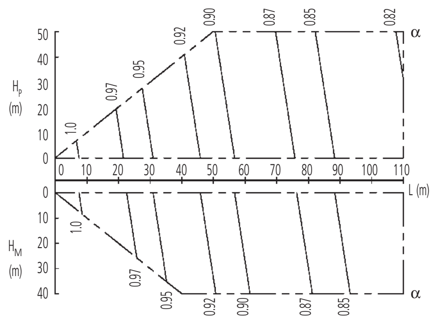
Temper grade and Thickness

Temper grade	O Type		1/2H Type
Outer diameter	ø 9.5	ø 15.9	ø 19.1
Minimum wall thickness	0.80	0.99	0.80

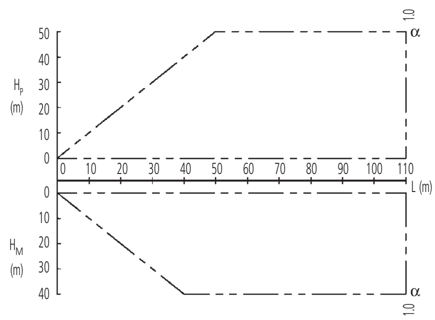
4 Capacity correction factor

RXQ8M

- Rate of change in cooling capacity



- Rate of change in heating capacity



3D048205B

NOTES

1 These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions.
Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.

2 With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.

3 Method of calculating A/C (cooling / heating) capacity:
The maximum A/C of the system will be either the total A/C capacity of the indoor units obtained from capacity characteristic table or the maximum A/C capacity of outdoor units as mentioned below, whichever smaller.
Calculating A/C capacity of outdoor units

- Condition: Indoor unit combination ratio does not exceed 100%
  Maximum A/C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the 100% combination
  x capacity change rate due to piping length to the farthest indoor unit
- Condition: Indoor unit combination ratio exceeds 100%
  Maximum A/C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the combination
  x capacity change rate due to piping length to the farthest indoor unit

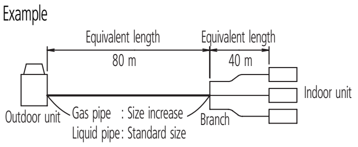
4 When overall equivalent pipe length is 90m or more, the diameter of the main gas and liquid pipes (outdoor unit-branch sections) must be increased.
[Diameter of above case]

Model	gas	liquid
RXQ8M	ø 22.2	ø 12.7

5 Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.
Overall equivalent length = (Equivalent length to main pipe) x Correction factor + (Equivalent length after branching)
Choose a correction factor from the following table.
When cooling capacity is calculated: gas pipe size
When heating capacity is calculated: liquid pipe size.

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

6 Example



In the above case
(Cooling) Overall equivalent length = 80m x 0.5 + 40m = 80m
(Heating) Overall equivalent length = 80m x 0.5 + 40m = 80m
The rate of change in cooling capacity when Hp=0m is thus approximately 0.86
The rate of change in heating capacity when Hp=0m is thus approximately 1.0

EXPLANATION OF SYMBOLS

H_p : Level difference (m) between indoor and outdoor units with indoor unit in inferior position
H_M : Level difference (m) between indoor and outdoor units with indoor unit in superior position
L : Equivalent pipe length (m)
α : Rate of change in cooling/heating capacity

Diameter of the main pipes (standard size)

Model	gas	liquid
RXQ8M	ø 19.1	ø 9.5

Temper grade and Thickness

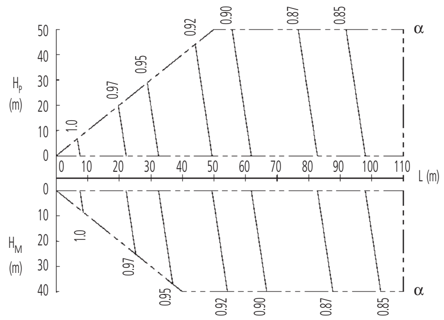
Temper grade	O Type			1/2H Type			
Outer diameter	ø 9.5	ø 12.7	ø 15.9	ø 19.1	ø 22.2	ø 28.6	ø 31.8
Minimum wall Thickness	0.80	0.80	0.99	0.80	0.80	0.99	1.10

4

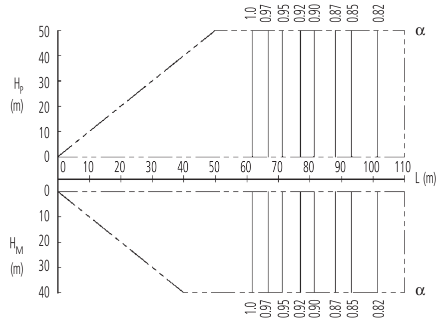
4 Capacity correction factor

RX(Y)Q10M

- Rate of change in cooling capacity



- Rate of change in heating capacity



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NOTES

1 These figures illustrate the rate of change in capacity of a standard indoor unit system at maximum load (with the thermostat set to maximum) under standard conditions.
Moreover, under partial load conditions there is only a minor deviation from the rate of change in capacity shown in the above figures.

2 With this outdoor unit, evaporating pressure constant control when cooling, and condensing pressure constant control when heating is carried out.

3 Method of calculating A/C (cooling / heating) capacity:
The maximum A/C of the system will be either the total A/C capacity of the indoor units obtained from capacity characteristic table or the maximum A/C capacity of outdoor units as mentioned below, whichever smaller.
Calculating A/C capacity of outdoor units

- Condition: Indoor unit combination ratio does not exceed 100%
  Maximum A./C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the 100% combination
  x capacity change rate due to piping length to the farthest indoor unit
- Condition: Indoor unit combination ratio exceeds 100%
  Maximum A./C capacity of outdoor units = A/C capacity of outdoor units obtained from capacity characteristic table at the combination
  x capacity change rate due to piping length to the farthest indoor unit

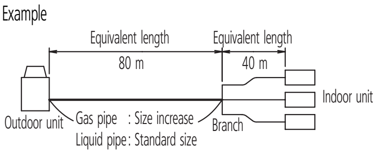
4 When overall equivalent pipe length is 90m or more, the diameter of the main gas and liquid pipes (outdoor unit-branch sections) must be increased.
[Diameter of above case]

Model	gas	liquid
RX(Y)Q10M	ø 25.4	ø 12.7

5 Read cooling / heating capacity rate of change in the above figures based on the following equivalent length.
Overall equivalent length = (Equivalent length to main pipe) x Correction factor + (Equivalent length after branching)
Choose a correction factor from the following table.
When cooling capacity is calculated: gas pipe size
When heating capacity is calculated: liquid pipe size.

Rate of change (object piping)	Correction factor	
	Standard size	Size increase
Cooling (gas pipe)	1.0	0.5
Heating (liquid pipe)	1.0	0.5

6 Example



In the above case
(Cooling) Overall equivalent length = 80m x 0.5 + 40m = 80m
(Heating) Overall equivalent length = 80m x 0.5 + 40m = 80m
The rate of change in cooling capacity when Hp=0m is thus approximately 0.87
The rate of change in heating capacity when Hp=0m is thus approximately 0.90

EXPLANATION OF SYMBOLS

H_p : Level difference (m) between indoor and outdoor units with indoor unit in inferior position
H_M : Level difference (m) between indoor and outdoor units with indoor unit in superior position
L : Equivalent pipe length (m)
α : Rate of change in cooling/heating capacity

Diameter of the main pipes (standard size)

Model	gas	liquid
RX(Y)Q10M	ø 22.2	ø 9.5

Temper grade and Thickness

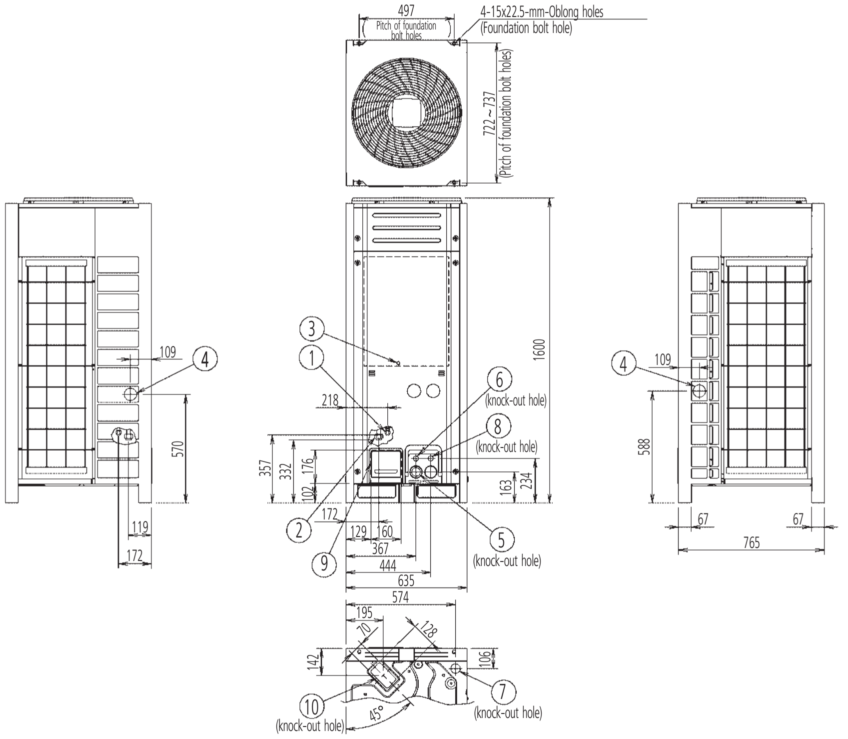
Temper grade	O Type		1/2H Type	
Outer diameter	ø 9.5	ø 12.7	ø 22.2	ø 25.4
Minimum wall Thickness	0.80	0.80	0.80	0.88

4

5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing

RX(Y)Q5M



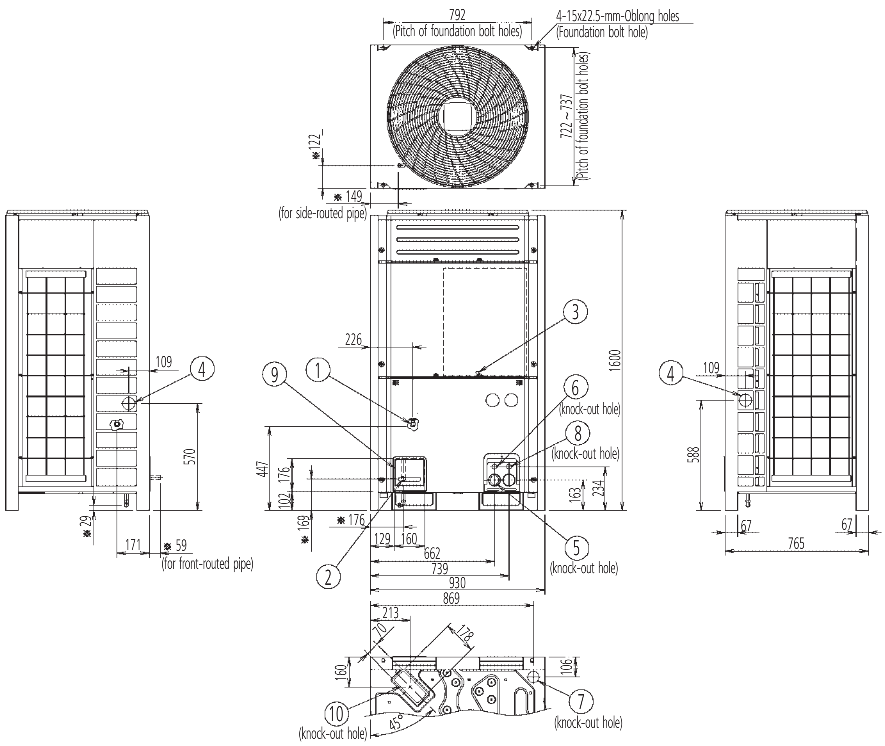
No.	Parts name	Remarks
1	Liquid pipe connection port	ø9.5 Flare connection
2	Gas pipe connection port	ø15.9 Flare connection
3	Grounding terminal	Inside of switch box (M8)
4	Power cord routing hole (side)	ø62
5	Power cord routing hole (front)	ø45
6	Power cord routing hole (front)	ø27
7	Power cord routing hole (bottom)	ø50
8	Wire routing hole (front)	ø27
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	See note 1.

NOTES

1 Refer to the installation instructions when the pipes are routed through the bottom of the unit.

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RX(Y)Q8, 10M



No.	Parts name	Remarks
1	Liquid pipe connection port	ø9.5 Flare connection
2	Gas pipe connection port	See note 3.
3	Grounding terminal	Inside of switch box (M8)
4	Power cord routing hole (side)	ø62
5	Power cord routing hole (front)	ø45
6	Power cord routing hole (front)	ø27
7	Power cord routing hole (bottom)	ø50
8	Wire routing hole (front)	ø27
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	See note 2.

NOTES

1 The dimensions marked by an asterisk (*) are those with the installation of the provided pipes.

2 Refer to the installation instructions when the pipes are routed through the bottom of the unit.

3 [Heat pump type]
ø19.1 Brazing connection 8HP
ø22.2 Brazing connection 10HP
[Cooling only type]
ø19.1 Brazing connection 8HP
ø22.2 Brazing connection 10HP

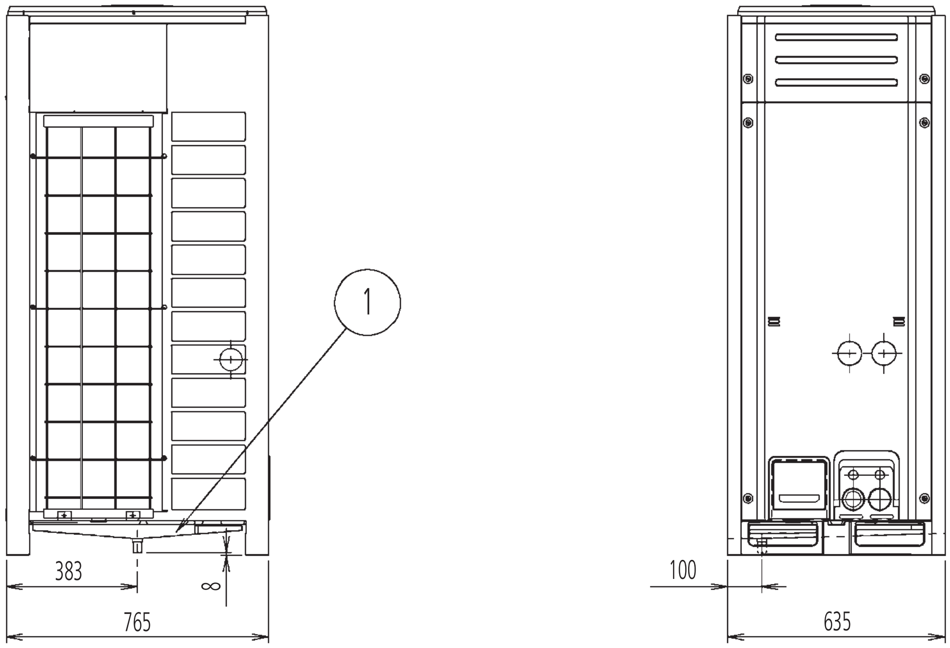
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5

5 Dimensional drawing & centre of gravity

5 - 1 Dimensional drawing

RX(Y)Q5M

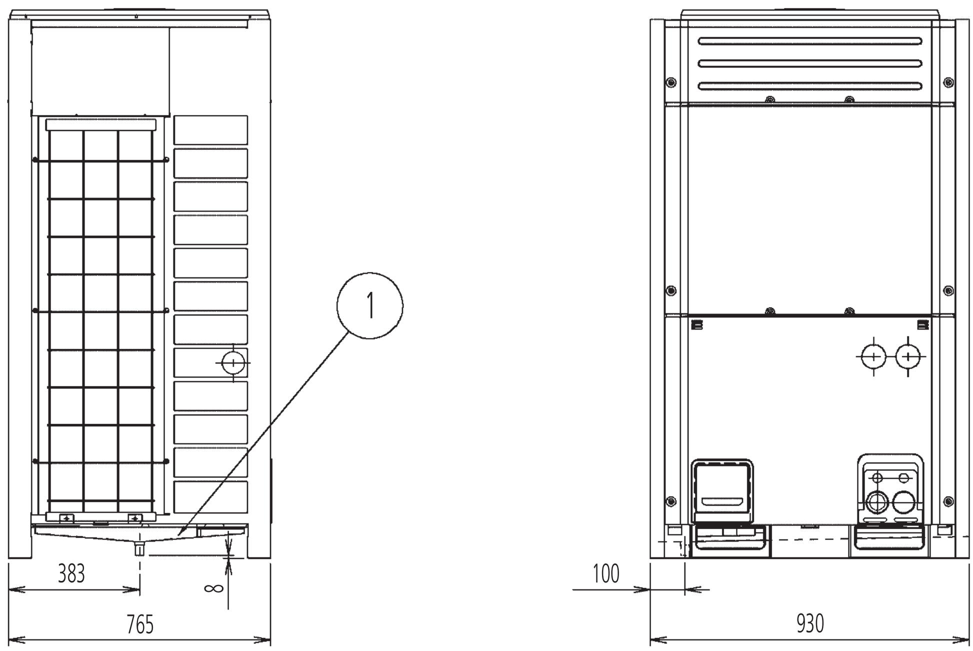


Parts No.	Part name	Remark
1	Central drain pan kit	KWC26B160

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RX(Y)Q8, 10M



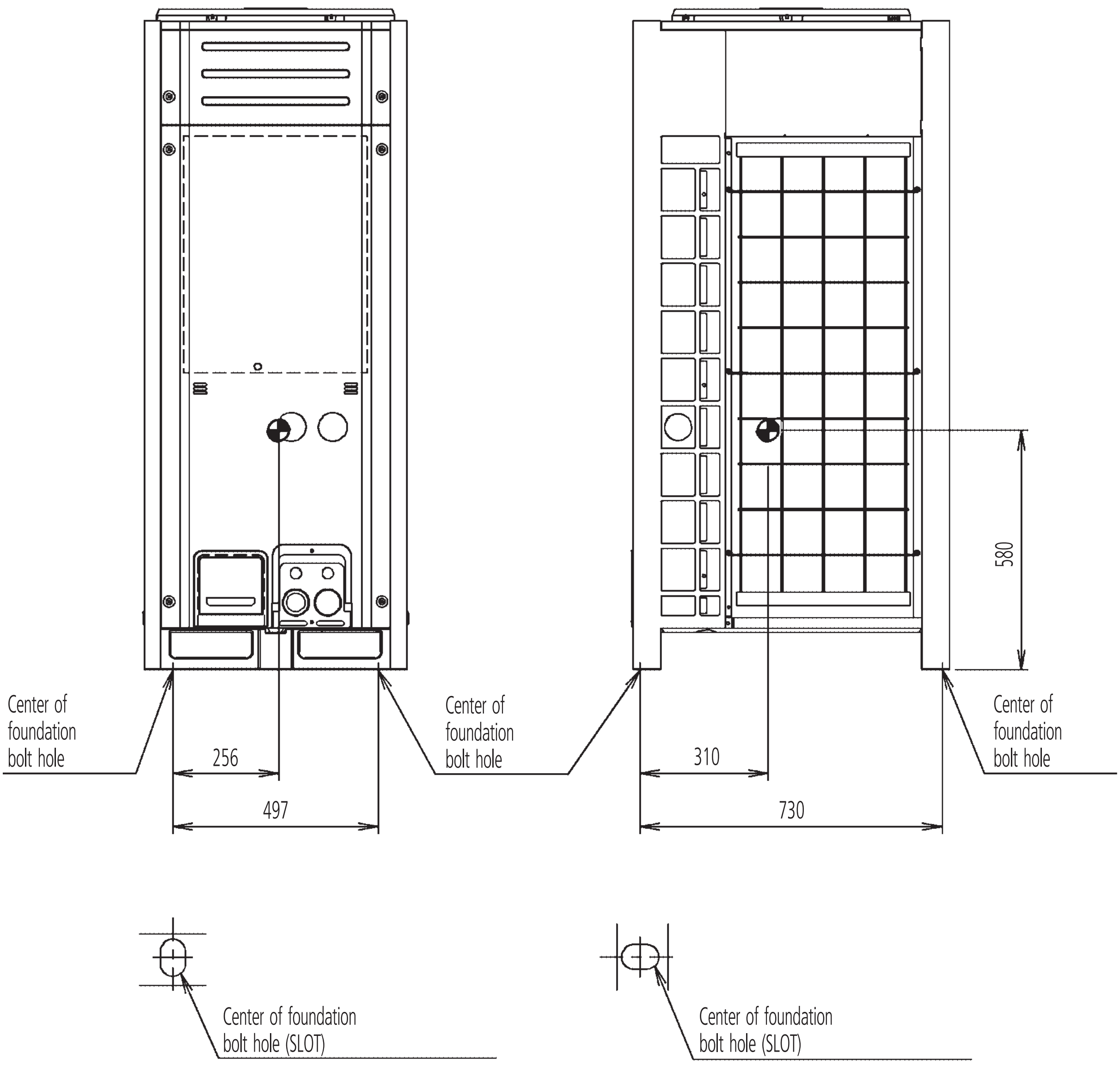
Parts No.	Part name	Remark
1	Central drain pan kit	KWC26B280

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5 Dimensional drawing & centre of gravity

5 - 2 Centre of gravity

RX(Y)Q5M

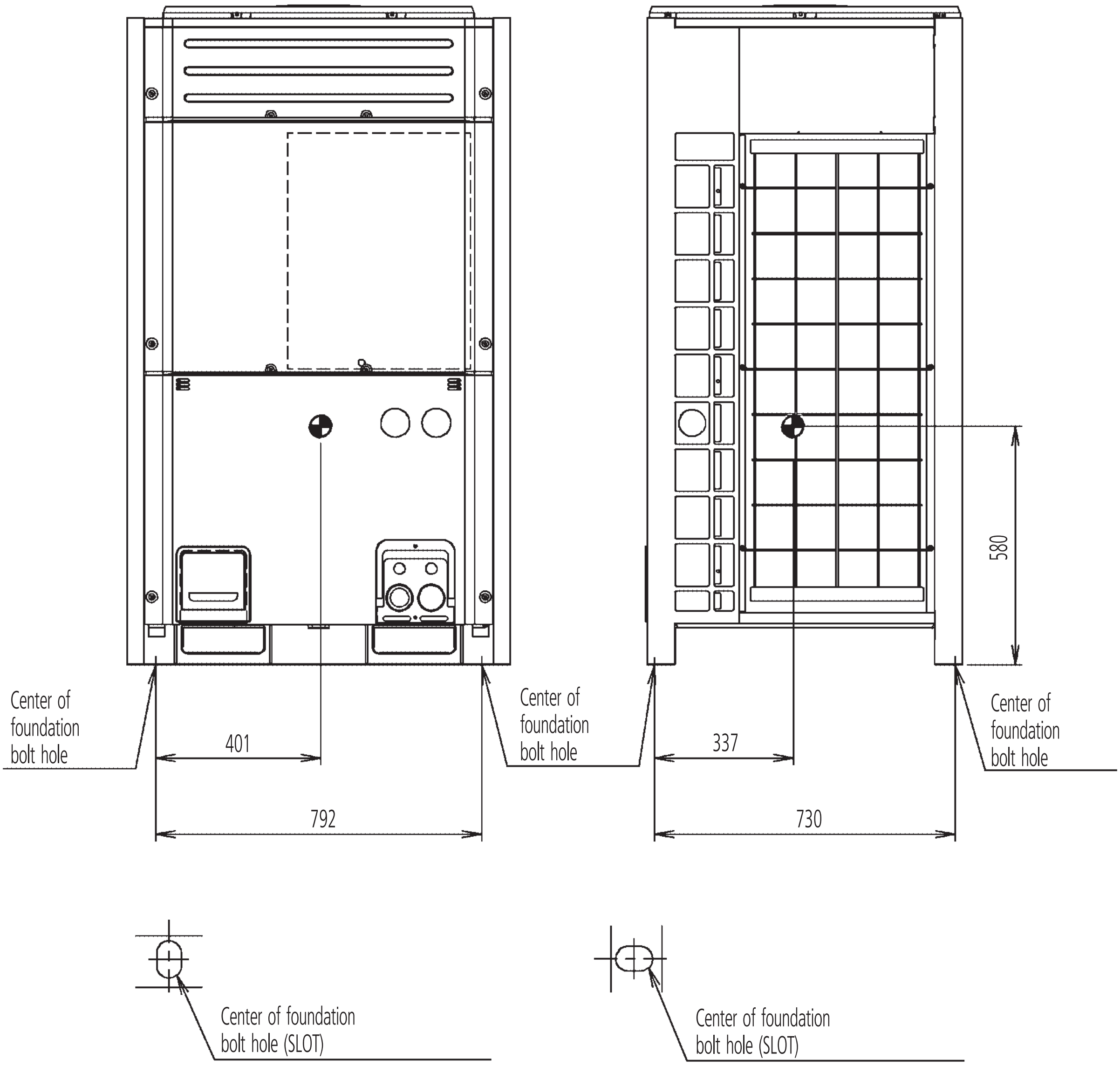


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5 Dimensional drawing & centre of gravity

5 - 2 Centre of gravity

RX(Y)Q8, 10M

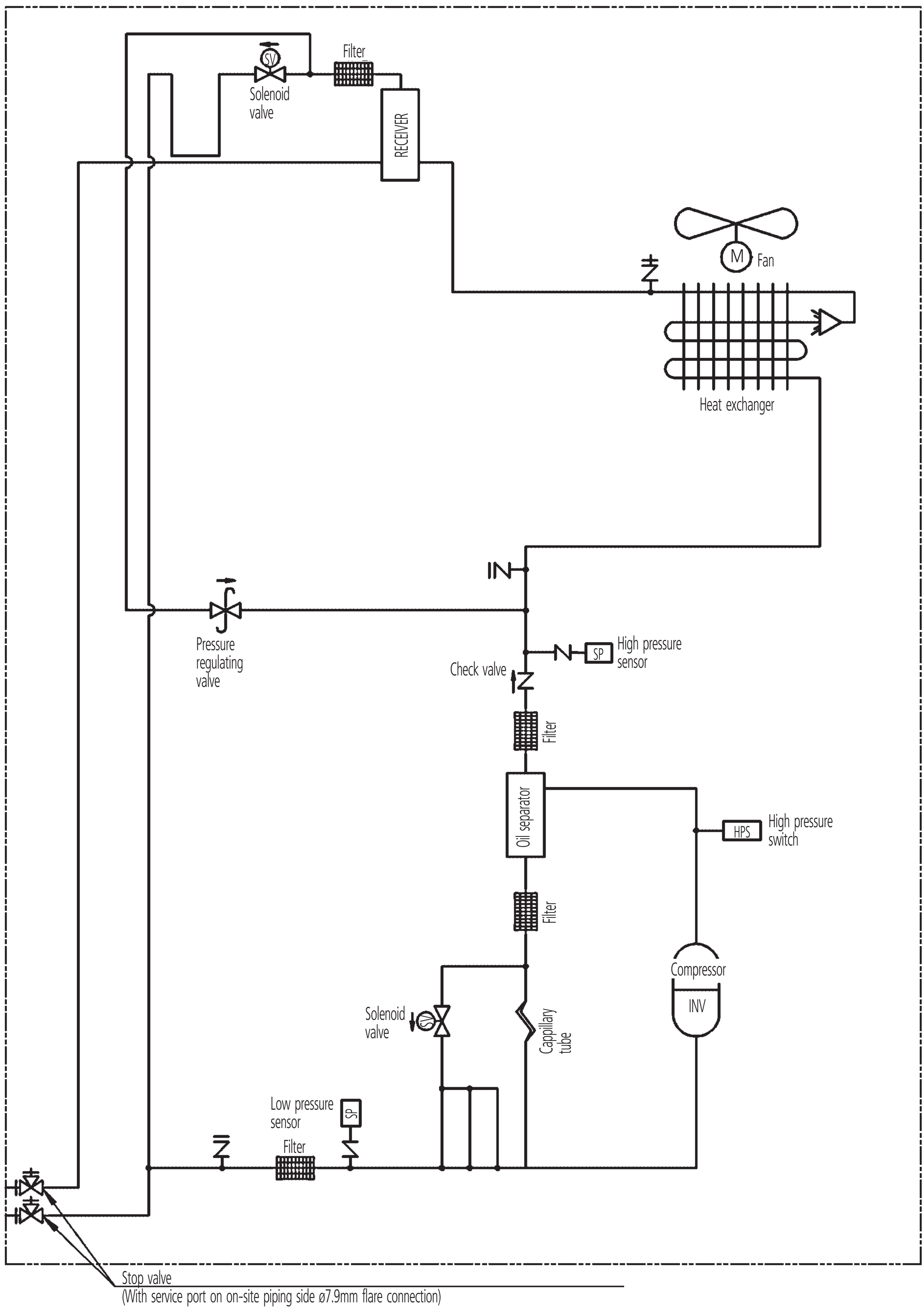


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5

6 Piping diagram

RXQ5M

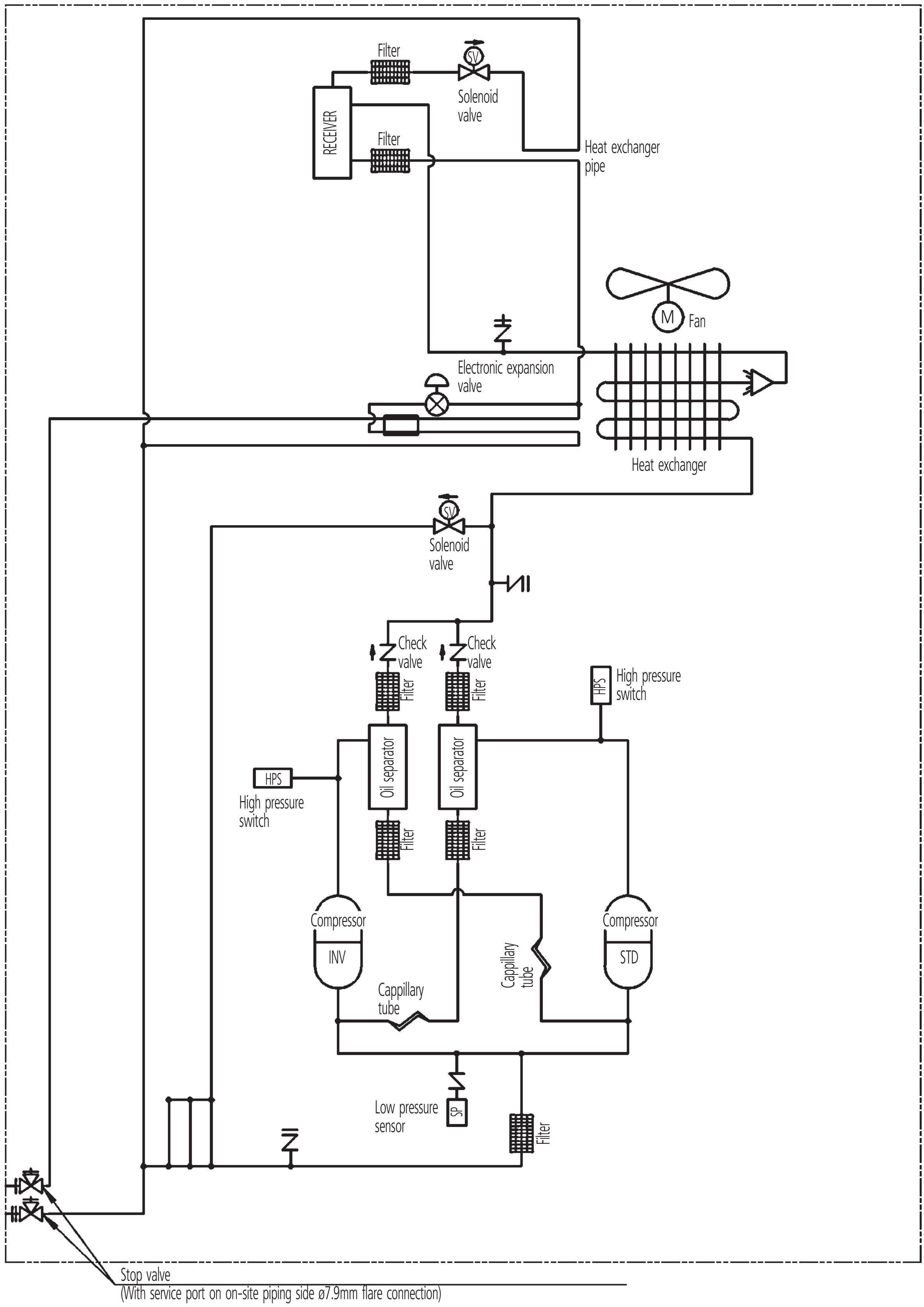


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6

6 Piping diagram

RXQ8,10M

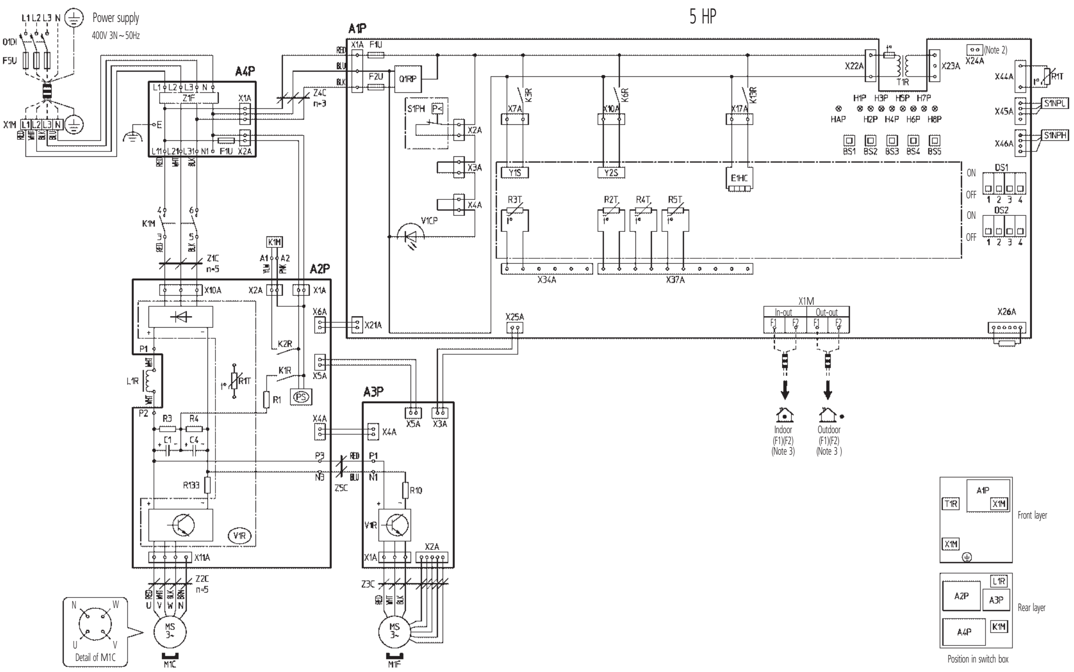


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7 Wiring diagram

7 - 1 Wiring diagram

RXQ5M9W1B



A1P	Printed circuit board (Main)	K1R	Magnetic relay (A2P)	R3T	Thermistor (M1C Discharge)
A2P	Printed circuit board (Inverter)	K2R	Magnetic relay (K1M)	R4T	Thermistor (Heat exchanger deicer)
A3P	Printed circuit board (Fan motor)	K3R	Magnetic relay (Y1S)	R5T	Thermistor (Heat exchanger outlet)
A4P	Printed circuit board (Noise filter)	K6R	Magnetic relay (Y2S)	S1NPH	Pressure sensor (High)
BS1 ~ BS5	Push button switch	K13R	Magnetic relay (E1HC)	S1NPL	Pressure sensor (Low)
	(Mode, Set, Return, Test, Reset)	L1R	Reactor	S1PH	Pressure switch (High)
C1, C4	Capacitor	M1C	Motor (Compressor)	T1R	Transformer (220-240V/20V)
DS1, DS2	DIP switch	M1F	Motor (Fan)	V1CP	Safety devices input
E1HC	Crankcase heater	PS	Switching power supply	V1R	Power module (A2P)
F1U	Fuse (250V, 5A Ⓑ) (A4P)	Q1RP	Phase reversal detect circuit	V2R	Power module (A3P)
F1U, F2U	Fuse (250V, 10A Ⓑ) (A1P)	Q1DI	Earth leakage breaker	X1M	Terminal strip (Power supply)
F5U	Field fuse	R1	Resistor (Current limiting)	X1M	Terminal strip (Control) (A1P)
H1P ~ H8P	Pilotlamp (Service monitor-orange)	R10, R133	Resistor (Current sensor)	Y1E	Electronic expansion valve
	[H2P] Prepare, test .... flickering	R3, R4	Resistor	Y1S	Solenoid valve (Hot gas)
	Malfuntion detection ..... light up	R1T	Thermistor (Air) (A1P)	Y2S	Solenoid valve (Receiver gas purge)
HAP	Pilotlamp (Service monitor-green)	R1T	Thermistor (Fin) (A2P)	Z1C ~ Z5C	Noise filter (Ferrite core)
K1M	Magnetic contactor (M1C)	R2T	Thermistor (Suction)	Z1F	Noise filter (With surge absorber)

: Field wiring
: Connector
: Terminal
: Terminal strip
: Protective earth (screw)
: Functional earthing

COLORS :

BLK : Black	RED : Red
WHT : White	BLU : Blue
ORG : Orange	PNK : Pink
GRY : Grey	YLW : Yellow
BRN : Brown	GRN : Green

NOTES

1 This wiring diagram applies only to the outdoor unit.

2 When using the option adaptor, refer to the installation manual.

3 Refer to the installation manual, for connection wiring to indoor-outdoor transmission F1•F2, outdoor-outdoor transmission F1•F2, outdoor-multi transmission Q1•Q2 and on how to use BS1 ~ BS5 and DS1, DS2 switch.

4 Do not operate the unit by short-circuiting protection device S1PH.

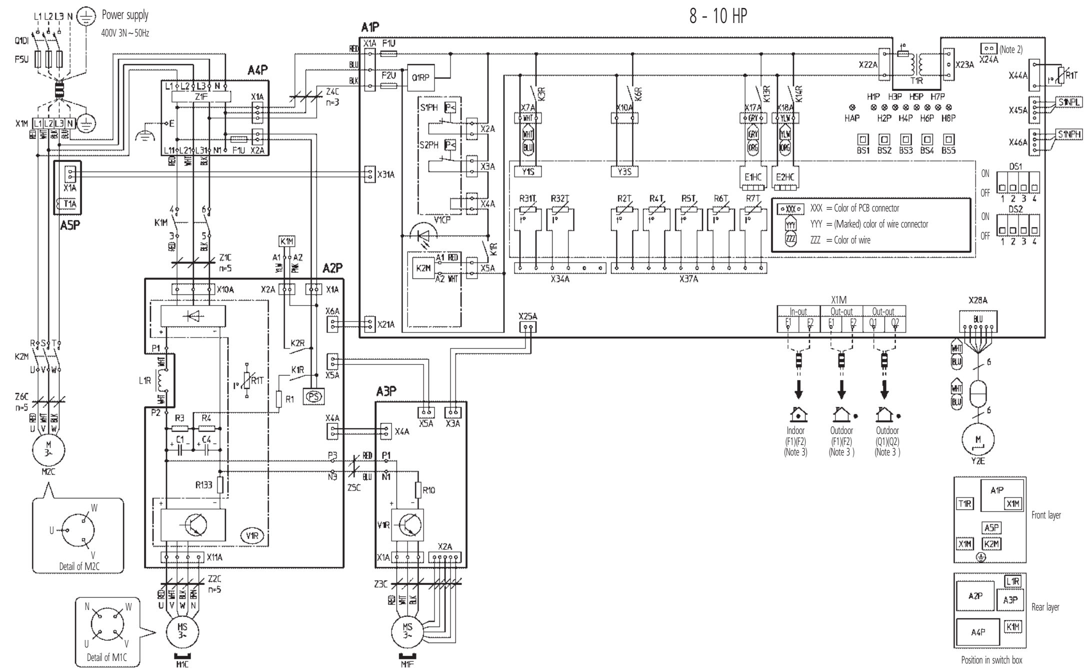
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7

7 Wiring diagram

7 - 1 Wiring diagram

RXYQ8,10M9W1B



A1P	Printed circuit board (Main)	K1R	Magnetic relay (A2P)	R32T	Thermistor (M2C Discharge)
A2P	Printed circuit board (Inverter)	K2R	Magnetic relay (K1M)	R4T	Thermistor (Heat exchanger deicer)
A3P	Printed circuit board (Fan motor)	K3R	Magnetic relay (Y1S)	R5T	Thermistor (Heat exchanger outlet)
A4P	Printed circuit board (Noise filter)	K6R	Magnetic relay (Y3S)	R6T	Thermistor (Liq. pipe receiver)
A5P, A6P	Printed circuit board (Current sensor)	K8R	Magnetic relay (Y4S)	R7T	Thermistor (Oil pipe)
BS1～BS5	Push button switch	K13R	Magnetic relay (E1HC)	S1NPH	Pressure sensor (High)
	(Mode, Set, Return, Test, Reset)	K14R	Magnetic relay (E2HC)	S1NPL	Pressure sensor (Low)
C1, C4	Capacitor	L1R	Reactor	S1PH, S2PH	Pressure switch (High)
DS1, DS2	DIP switch	M1C, M2C	Motor (Compressor)	T1A	Current sensor
E1HC, E2HC	Crankcase heater	M1F	Motor (Fan)	T1R	Transformer (230/20V)
F1U	Fuse (250V, 5A Ⓑ) (A4P)	PS	Switching power supply	V1CP	Safety devices input
F1U, F2U	Fuse (250V, 10A Ⓑ) (A1P)	Q1RP	Phase reversal detect circuit	V1R	Power module (A2P)
F5U	Field fuse	Q1DI	Earth leakage breaker	V1R	Power module (A3P)
H1P ～ H8P	Pilotlamp (Service monitor-orange)	R1	Resistor (Current limiting)	X1M	Terminal strip (Power supply)
	[H2P] Prepare, test .... flickering	R10, R133	Resistor (Current sensor)	X1M	Terminal strip (Control) (A1P)
	Malfuntion detection .... light up	R3, R4	Resistor	Y2E	Electronic expansion valve (Subcool)
HAP	Pilotlamp (Service monitor-green)	R1T	Thermistor (Air) (A1P)	Y1S	Solenoid valve (Hot gas)
K1M	Magnetic contactor (M1C)	R1T	Thermistor (Fin) (A2P)	Y3S	Solenoid valve (Receiver gas purge)
K2M	Magnetic contactor (M2C)	R2T	Thermistor (Suction)	Z1F	Noise filter (With surge absorber)
K1R	Magnetic relay (K2M) (A1P)	R31T	Thermistor (M1C Discharge)		

: Field wiring
: Connector
: Terminal
: Terminal strip
: Protective earth (screw)
: Functional earthing

COLORS :

BLK : Black	RED : Red
WHT : White	BLU : Blue
ORG : Orange	PNK : Pink
GRY : Grey	YLW : Yellow
BRN : Brown	GRN : Green

NOTES

1 This wiring diagram applies only to the outdoor unit.

2 When using the option adaptor, refer to the installation manual.

3 Refer to the installation manual, for connection wiring to indoor-outdoor transmission F1•F2, outdoor-outdoor transmission F1•F2, outdoor-multi transmission Q1•Q2 and on how to use BS1～BS5 and DS1, DS2 switch.

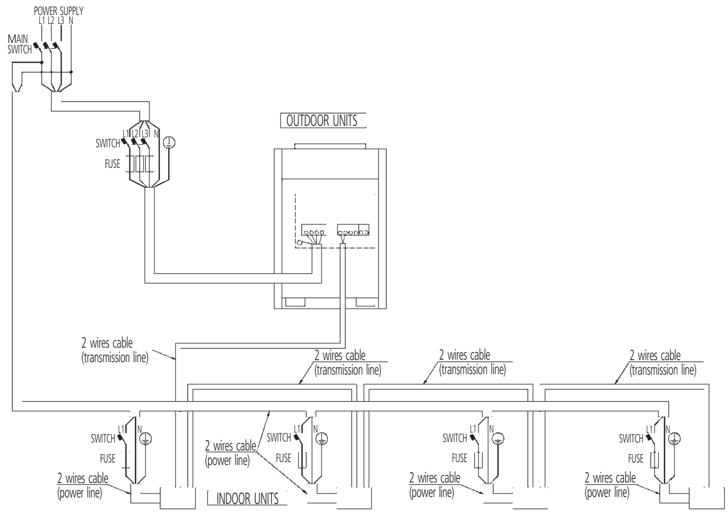
4 Do not operate the unit by short-circuiting protection devices S1PH, S5PH.

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7 Wiring diagram

7 - 2 External connection diagram

RXQ-M



NOTES

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipment.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally.
    Running the product in reversed phase may break the compressor and other parts.

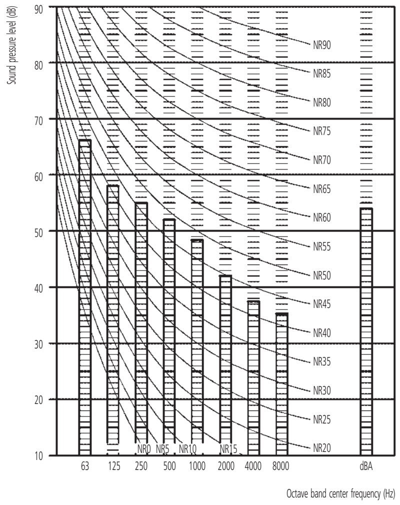
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7

8 Sound level

8 - 1 Sound pressure spectrums

RX(Y)Q5M9W1B 3TW26647-1



NOTES

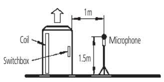
1 Data is valid at free field condition (Measured in a semi-anachoic room).

2 dBA = A-weighted sound pressure level. (A-scale according to IEC)

3 Reference acoustic pressure 0dB = 20μPa.

4 If sound is measured under actual installation conditions, the measured value will be higher due to environmental noise and sound reflections.

5 Location of microphone

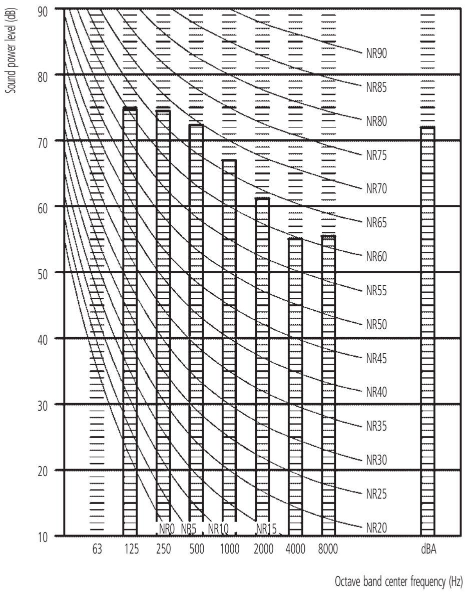


8

8 Sound level

8 - 2 Sound power spectrums

RX(Y)Q5M9W1B 3TW26647-2



NOTES

1 dBA = A-weighted sound power level. (A-scale according to IEC)

2 Reference acoustic intensity 0dB = 10E-6µW/m^2.

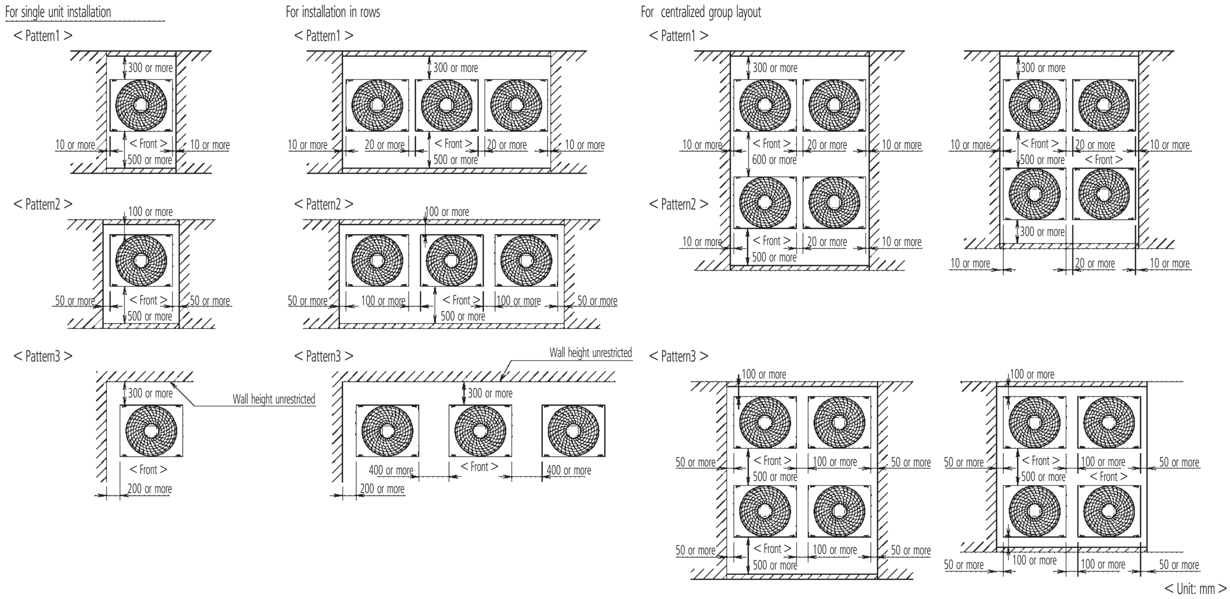
3 Measured according to ISO 3744.

8

9 Installation

9 - 1 Service space

RXQ-M



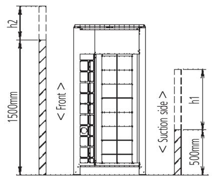
NOTES

1 Height of walls in case of Patterns 1 and 2:
Front: 1500mm
Suction side: 500mm
Side: Height unrestricted.
Installation space shown in this drawing is based on the cooling operation at 35 degrees outdoor air temperature.
When the design outdoor air temperature exceeds 35 degrees or the load exceeds maximum ability because of much generation load of heat in all outdoor units, take the suction side space more broadly than the space to be shown in this drawing.

2 If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the figure on the right.

3 When installing the units the most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available always bearing in mind the need to leave enough space for a person to pass between units and wall and for the air to circulate freely.
(If more units are to be installed than in the above patterns your layout should take account of the possibility of short circuits.)

4 The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

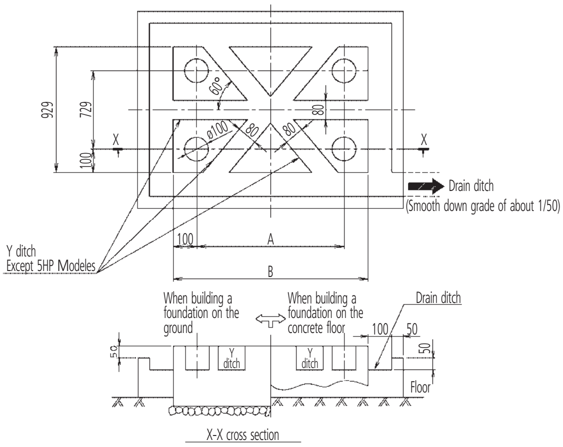


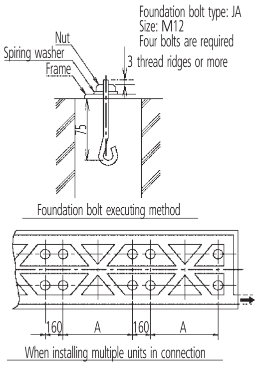
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9

9 Installation

9 - 2 Fixation and foundation of units





Model	A	B
5HP	497	697
8•10HP	792	992

NOTES

1. The proportions of cement: sand: gravel for the concrete shall be 1:2:4, and the reinforcement bars that their diameter are 10mm, (approx. 300mm intervals) shall be placed.
2. The surface shall be finished with mortar. The corner edges shall be chamfered.
3. When the foundation is built on a concrete floor, rubble is not necessary. However, the surface of the section on which the foundation is built shall have rough finish.
4. A drain ditch shall be made around the foundation to thoroughly drain water from the equipment installation area.
5. When installing the equipment on a roof, the floor strength shall be checked, and water-proofing measures shall be taken.
6. Y ditch is not necessary for 5HP models.

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9

9 Installation

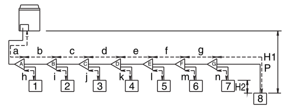
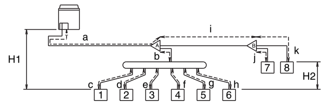
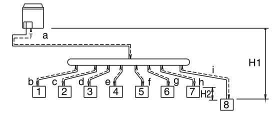
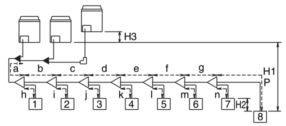
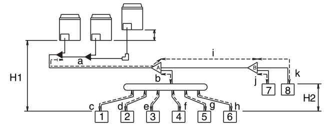
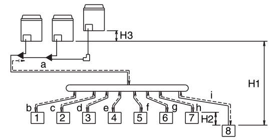
9 - 3 Refrigerant pipe selection

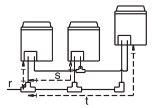
Example of connection
(Connection of 8 indoor units Heat pump system)

- Use the outdoor unit multi connection piping kit that is sold separately as an option (BHFQ22M909+1359) for the multi installation of outdoor units. Selection method is as shown in the right table.
- Never use the outdoor unit multi connection piping kit (BHFQ22M909+1359) that are sold separately as an option of M-type or T-joint.

1 indoor unit
A refnet joint
refnet header
◄ outdoor multi connection piping kit

Install the joint part (◄ part in the figure) of the outdoor unit multi connection piping kit horizontally with attention to the installation restrictions described in "connecting the refrigerant piping".
(*) If the system capacity is RXYQ18 or more, re-read to the first outdoor branch as seen from the indoor unit.

	Branch with refnet joint	Branch with refnet joint and refnet header	Branch with refnet header
One outdoor unit installed (RX(Y)Q5~16)			
When multiple outdoor units installed (RXYQ18~...)			

			Branch with refnet joint	Branch with refnet joint and refnet header	Branch with refnet header
Maximum allowable length	Between outdoor and indoor units	Actual pipe length	Pipe length between outdoor(*) and indoor units ≤150 m		
			[Example] unit 8: a+b+c+d+e+f+g+p≤150 m	[Example] unit 6: a+b+h≤150 m, unit 8: a+i+k≤150 m	[Example] unit 8: a+i≤150 m
		Equivalent length	Equivalent pipe length between outdoor(*) and indoor units ≤175 m (Assume equivalent pipe length of refnet joint to be 0.5 m and of the refnet header to be 1.0 m. (for calculation purposes))		
		Total extension length	Total piping length from outdoor unit* to all indoor units ≤300 m		
	Between outdoor branch and outdoor unit (Only for RXYQ18 or more)	Actual pipe length	Piping length from outdoor branch to outdoor unit ≤10 m. Approximate length: max. 13 m		
Allowable height	Between outdoor and indoor units	Difference in height	Difference in height between outdoor and indoor units (H1)≤50 m (≤40 m if outdoor unit is located in a lower position).		 r≤10 m (Approximate length: max. 13 m) s≤10 m (Approximate length: max: 13 m) t≤10 m (Approximate length: max 13 m)
	Between indoor and indoor units	Difference in height	Difference in height between adjacent indoor units (H2)≤15 m		
	Between outdoor and outdoor units	Difference in height	Difference in height between outdoor unit (main) and outdoor unit (sub) (H3)≤5 m		
Allowable length after the branch		Actual pipe length	Pipe length from first refrigerant branch kit (either refnet joint or refnet header) to indoor unit ≤40 m		
			[Example] unit 8: b+c+d+e+f+g+p≤40 m	[Example] unit 6: b+h≤40 m, unit 8: i+k≤40 m	[Example] unit 8: i≤40 m

Refrigerant branch kit selection

Refrigerant branch kits can only be used with R-410A.

How to select the refnet joint

- When using refnet joints at the first branch counted from the outdoor unit side. Choose from the following table in accordance with the capacity of the outdoor unit.

Outdoor unit capacity type	Refrigerant branch kit name
RXYQ5	KHRQ22M20T7
RXYQ8+10	KHRQ22M29T7
RXYQ12~22	KHRQ22M64T7
RXYQ24	KHRQ22M75T7

- For refnet joints other than the first branch, select the proper branch kit model based on the total capacity index.

Indoor capacity type	Refrigerant branch kit name
<200	KHRQ22M20T7
200≤x<290	KHRQ22M29T7
290≤x<640	KHRQ22M64T7
>640	KHRQ22M75T7

How to select the refnet header

- Choose from the following table in accordance with the total capacity of all the indoor units connected below the refnet header.
- Note: 250 type cannot be connected below the refnet header.

Indoor capacity type	Refrigerant branch kit name
<290	KHRQ22M29H7 (Max. 8 kit)
290≤x<640	KHRQ22M64H7 (Max. 8 kit)
>640	KHRQ22M75H7 (Max. 8 kit)

How to choose an outdoor branch kit (needed if the outdoor unit capacity type is RXYQ18 or more.)

- Choose from the following table in accordance with the number of outdoor units.

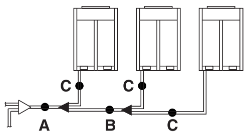
Number of outdoor units	Branch kit name
2	BHFQ22M909 (Max. 4 kit)
3	BHFQ22M1359 (Max. 8 kit)

	Branch with refnet joint	Branch with refnet joint and refnet header	Branch with refnet header
Example of downstream indoor units	[Example] in case of refnet joint C; indoor units 3+4+5+6+7+8	[Example] in case of refnet joint B; indoor units 7+8, in case of refnet header; indoor units 1+2+3+4+5+6	[Example] in case of refnet header; indoor units 1+2+3+4+5+6+7+8

9 Installation

9 - 3 Refrigerant pipe selection

Pipe size selection
For an outdoor unit multi installation (RXYQ18~48M9W1B), make the settings in accordance with the following figure.



A. Piping between outdoor unit and refrigerant branch kit
- Match to the size of the connection piping on the outdoor unit.

Outdoor unit connection piping size

Outdoor unit capacity type	Piping size (outer diameter) Gas pipe	Piping size (outer diameter) Liquid pipe
RXYQ5	Ø15.9	Ø9.5
RXYQ8	Ø19.1	
RXYQ10	Ø22.2	
RXYQ12~16	Ø28.6	Ø12.7
RXYQ18~22		Ø15.9
RXYQ24	Ø34.9	
RXYQ26~34		Ø19.1
RXYQ36~48	Ø41.3	

Piping between refrigerant branch kits
- Choose from the following table in accordance with the total capacity of all the indoor units connected below this.
- Do not let the connection piping exceed the refrigerant piping size chosen by general system model name.

Indoor capacity index	Piping size (outer diameter) Gas pipe	Piping size (outer diameter) Liquid pipe
<200	Ø15.9	Ø9.5
200≤x<290	Ø22.2	
290≤x<420	Ø28.6	Ø12.7
420≤x<640		Ø15.9
640≤x<920	Ø34.9	Ø19.1
>920	Ø41.3	

B. Piping between outdoor branches
- Choose from the following table in accordance with the total capacity of all the oudoor units connected above this.

Outdoor capacity index	Piping size (outer diameter) Gas pipe	Piping size (outer diameter) Liquid pipe
<22 HP	Ø28.6	Ø15.9
24 HP	Ø34.9	
>26 HP		Ø19.1

Piping between refrigerant branch kit and indoor unit
- Pipe size for direct connection to indoor unit must be the same as the connection size of indoor unit.

Indoor capacity type	Piping size (outer diameter) Gas pipe	Piping size (outer diameter) Liquid pipe
20~50	Ø12.7	Ø6.4
63~125	Ø15.9	Ø9.5
200	Ø19.1	
250	Ø22.2	

C. Piping between outdoor branch and outdoor unit

Outdoor capacity type	Piping size (outer diameter) Gas pipe	Piping size (outer diameter) Liquid pipe
RX(Y)Q8	Ø19.1	Ø9.5
RX(Y)Q10	Ø22.2	
RXYQ12~16	Ø28.6	Ø12.7

How to calculate the additional refrigerant to be charged
Additional refrigerant to be charged R (kg)
R should be rounded off in units of 0.1 kg

NOTE
If a negative result is gotten for R from the formula at right, no refrigerant needs to be added nor removed.

R= (Total length (m) of liquid piping size at Ø22.2) x0.35+ (Total length (m) of liquid piping size at Ø19.1) x0.25+ (Total length (m) of liquid piping size at Ø15.9) x0.17+ (Total length (m) of liquid piping size at Ø12.7) x0.11

+ (Total length (m) of liquid piping size at Ø9.5) x0.054+ (Total length (m) of liquid piping size at Ø6.4) x0.022+

Model	Amount of refrigerant
RXYQ8~32	1 kg
RXYQ5, 34~48	0 kg

Example for refrigerant branch using refnet joint and refnet header for RXYQ34M9W1B
If the outdoor unit is RXYQ34M9W1B and the piping lengths are as below

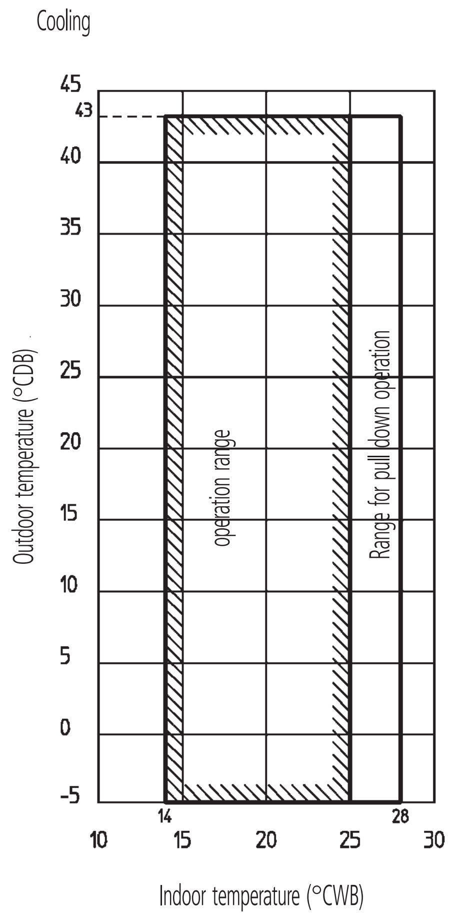
a: Ø19.1x30 m	d: Ø9.5x10 m	g: Ø6.4x10 m	j: Ø6.4x10 m
b: Ø15.9x10 m	e: Ø9.5x10 m	h: Ø6.4x20 m	k: Ø6.4x9 m
c: Ø9.5x10 m	f: Ø9.5x10 m	i: Ø12.7x10 m	

R = [30x0.25]+[10x0.17]+[10x0.11]+[40x0.054]+[49x0.022]+0 = 13.538 ≤R = 13.5 kg

9

10 Operation range

RXQ-M



4TW25873-1A

NOTES

1. These figures assume the following operating conditions:
   Indoor and outdoor units:
   Equivalent pipe length: 7.5m
   Level difference: 0m
2. Depending on operation and installation conditions.
   The indoor unit can change over the freeze-up operation (indoor de-icing)
3. To reduce the freeze-up operation (indoor de-icing) frequency it is recommended
   to install the outdoor unit in a location not exposed to wind.

10

2

VRV II

Systems

ISO14001 assures an effective environmental management system in order to help protect human•health•and the environment from the potential impact of our activities, products and services and to assist in maintaining and improving the quality of the•environment.

Daikin Europe N.V. is approved by LRQA for its Quality Management System in accordance with the ISO9001 standard. ISO9001 pertains to quality assurance regarding design, development, manufacturing as well as to services related to the product.

Daikin units comply with the European regulations that guarantee the safety of the product.

VRV products are not within the scope of the Eurovent certification programme.

Daikin equipment is designed for comfort applications. For use in other applications, please contact your local Daikin representative.

Specifications are subject to change without prior notice

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EEDE05-2 • 06/2005
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